

Product datasheet for SC119485

ATP citrate lyase (ACLY) (NM_001096) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP citrate lyase (ACLY) (NM_001096) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACLY
Synonyms:	ACL; ATPCL; CLATP
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001096, the custom clone sequence may differ by one or more nucleotides

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ATGTCGGCCAAGGCAATTCAGAGCAGACGGGCAAAGAACTCCTTTACAAGTTCATCTGTACCACCTCAG
CCATCCAGAATCGGTTCAAGTATGCTCGGGTCACTCCTGACACAGACTGGGCCCGCTTGTGCAGGACCA
CCCCTGGCTGCTCAGCCAGAACTTGGTAGTCAAGCCAGACCAGCTGATCAAACGTCGTGGAAAATTGGT
CTCGTTGGGGTCAACCTCACTCTGGATGGGGTCAAGTCCTGGTGAAGCCACGGCTGGGACAGGAAGCCA
CAGTTGGCAAGGCCACAGGCTTCTCAAGAAGTCTGATCGAGCCCTTCGTCCCCACAGTCAGGCTGA
GGAGTTCTATGTCTGCATCTATGCCACCCGAGAAGGGGACTACGTCCTGTCCACCACGAGGGGGGTGTG
GACGTGGGTGATGTGGACGCCAAGGCCAGAAGCTGCTTGTGGCGTGGATGAGAACTGAATCCTGAGG
ACATCAAAAAACACTGTTGGTCCACGCCCTGAAGACAAGAAAGAAATCTGGCCAGTTTTATCTCCGG
CCTCTTCAATTTCTACGAGGACTTGACTTCACCTACCTCGAGATCAATCCCCTTGATGTGACCAAAGAT
GGAGTCTATGCTTGAATGGCGGCCAAGGTGGACGCCACTGCCGACTACATCTGCAAAGTGAAGTGGG
GTGACATCGAGTTCCTCCCCCTTCGGCGGGAGGCATATCCAGAGGAAGCCTACATTGCAGACCTCGA
TGCCAAAAGTGGGGCAAGCCTGAAGCTGACCTTGCTGAACCCAAAGGGAGGATCTGGACCATGGTGCC
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CAATCTTTGTCCGAAGAGGTGGCCCCAACTATCAGGAGGGCTTACGGGTGATGGGAGAAGTCGGGAAGAC
CACTGGGATCCCCATCCATGTCTTTGGCACAGAGACTCACATGACGGCCATTGTGGGCATGGCCCTGGGC
CACCGGCCATCCCCAACAGCCACCCACAGCGGCCACACTGCAAACCTCCTCCTCAACGCCAGCGGGA
GCACATCGACGCCAGCCCCAGCAGGACAGCATCTTTTCTGAGTCCAGGGCCGATGAGGTGGCGCCTGC
AAAGAAGGCCAAGCCTGCCATGCCACAAGATTCAGTCCCAAGTCCAAGATCCCTGCAAGGAAAGAGCACC
ACCTCTTCAGCCGCCACACCAAGGCCATTGTGTGGGGCATGCAGACCCGGGCCGTGCAAGGCATGCTGG
ACTTTGACTATGTCTGCTCCCGAGACGAGCCCTCAGTGGCTGCCATGGTCTACCCCTTCACTGGGGACCA
CAAGCAGAAGTTTTACTGGGGGCACAAAGAGATCCTGATCCCTGTCTTCAAGAACATGGCTGATGCCATG

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AGGAAGCATCCGGAGGTAGATGTGCTCATCAACTTTGCCTCTCTCCGCTCTGCCTATGACAGCACCATGG
 AGACCATGAACTATGCCAGATCCGGACCATCGCCATCATAGCTGAAGGCATCCCTGAGGCCCTCACGAG
 AAAGCTGATCAAGAAGGCGGACCAGAAGGGAGTGACCATCATCGGACCTGCCACTGTTGGAGGCATCAAG
 CCTGGGTGCTTTAAGATTGGCAACACAGGTGGGATGCTGGACAACATCCTGGCCTCCAACTGTACCGCC
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 GTGTTACGCTATCAGGACACTCCAGGAGTCAAAATGATTGTGGTCTTGGAGAGATTGGGGGCATGAGG
 AATATAAGATTTGCCGGGCATCAAGGAGGGCCGCTCACTAAGCCCATCGTCTGCTGGTGCATCGGGAC
 GTGTGCCACCATGTTCTCCTCTGAGGTCAGTTTGGCCATGCTGGAGCTTGTGCCAACCCAGGCTTCTGAA
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 GAGAGATCATCCAGTCTGTATACGAAGATCTCGTGGCCATGGAGTATTGTACCTGCCAGGAGGTGCC
 GCCCCAAACCGTCCCATGGACTACTCCTGGGCCAGGAGCTTGGTTTGTATCCGCAAACCTGCCTCGTTC
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 AGGAAGAGATGGGCATTGGCGGGTCTCGGCCTCCTCTGGTTCAGAAAAGTTGCCTAAGTACTTTG
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 GGTTTGGGGTGCCTTGATGCAGCAGCCAAGATGTTCAAGTAAAGCCTTTGACAGTGGCATTATCCCAT
 GGAGTTTGTGAACAAGATGAAGAAGGAAGGGAAGCTGATCATGGGCATTGGTACCGAGTGAAGTCGATA
 AACAACCCAGACATGCGAGTGCAGATCCTCAAAGATTACGTACGGCAGCACTTCCTGCCACTCCTCTGC
 TCGATTATGCACTGGAAGTAGAGAAGATTACCACCTCGAAGAAGCCAAATCTTATCCTGAATGTAGATGG
 TCTCATCGGAGTCGATTTGTAGACATGCTTAGAACTGTGGTCTTTACTCGGGAGGAAGCTGATGAA
 TATATTGACATTGGAGCCCTCAATGGCATCTTTGTGCTGGGAAGGAGTATGGGGTTCATTGGACACTATC
 TTGATCAGAAGAGGCTGAAGCAGGGGCTGTATCGTATCCGTGGGATGATATTTTCATATGTTCTTCCGGA
 ACACATGAGCATGTAA

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_001096 unedited
 AGTATATTTGTATACGACTCACTATAGGGCGGCNCGCAATTCGCACCAGCCGGATTTTG
 CGGGTTCGTCGGGCTGTGGAAGAAGCGCCGCGCACGGACTTCGGCAGAGGTAGAGCAG
 GTCTCTCTGCAGCCATGTCGGCCAAGGCAATTTCAAGCAGACGGGCAAAGAATCCTTT
 ACAAGTTCATCTGTACCACCTCAGCCATCCAGAATCGGTTCAAGTATGCTCGGGTCACTC
 CTGACACAGACTGGGCCCGCTTGTGTCAGGACCACCCCTGGCTGCTCAGCCAGAACTTGG
 TAGTCAAGCCAGACCAGCTGATCAAACGTCGTGAAAACCTTGGTCTCGTTGGGGTCAACC
 TCACTCTGGATGGGGTCAAGTCTGGCTGAAGCCACGGCTGGGACAGGAAGCCACAGTTG
 GCAAGGCCACAGGCTTCCCTCAAGAACTTTCTGATCGAGCCCTTCGTCCCCACAGTCAGG
 CTGAGGAGTTCTATGTCTGCATCTATGCCACCCGAGAAGGGGACTACGTCCTGTTCCACC
 ACGAGGGGGTGTGGACGTGGGTGATGTGGACGCCAAGGCCAGAAAGCTGCTTGTGGCG
 TGGATGAGAACTGAATCCTGAGGACATCAAAAAACACCTGTTGGTCCACGCCCTGAAG
 ACAAGAAAGAAATCTGGCCAGTTTATCTCCGGCCTTCAATTTCTACGAGGACTTGT
 ACTTACCTACCTCGAGATCAATCCCCTTGTAGTGACCAAGATGAAGTCTATGTCCTTG
 ACTTGGCGGCCAAAGTGGACGCCACTGCCGACTACATCTGCANAGTGAAGTGGGGTGAC
 ATCGAGTTCCTTCCCCCTCTCGGCGGGAGGCATATCCAGAGGAAGCCTACCATGCAGAC
 CCGATGCCAAAAGTGGGACAGCCCTGAGCTGACCTGCTGAACCCAAGGNAGATCTGNAC
 CATGTGGCCG

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]

Transcript Variant: This variant (1) has an alternate splice site, which results in translation initiation at a downstream AUG start codon, compared to variant 3. The resulting isoform (1) is shorter at the N-terminus, compared to isoform 3.