

# Recombinant Human ACLY Protein, Myc/DDK-tagged, C13 and N15-labeled

**Cat. No.** ACLY-1295H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Product Overview</b> | ACLY MS Standard C13 and N15-labeled recombinant protein (NP_001087) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>      | 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. |
| <b>Molecular Mass</b>   | 120.8 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>AA Sequence</b>      | MSAKAISEQTGKELLYKFICTTSAIQNRFKYARVTPD TDWARLLQDHPWLLSQNLVV<br>KPDQLIKRRGKLGVLGVNLTLDGVKSWLKPRLGQEATVGKATGFLKNFLIEPFVPHS<br>QAEEFYVCIYATREGDYVLFHHEGGVDVGVD AKAQKLLVGVDEKLN PEDIKKHLLV<br>HAPEDKKEILASFISGLFNFYEDLYFTYLEINPLVVT KDGVVYVLDLAAKVDATADYICK<br>VKWGDIEFPPPPFGREAYPEEAYIADLDAKSGASLKL TLLNPKGRIWTMVAGGGASVV                                                                                                                                                                                                                                                                                                                                                                |

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YSDTICDLGGVNELANYGEYSGAPSEQQTYDYAKTILSLMTREKHPDGKILIIGGSIAN  
FTNVAATFKGIVRAIRDYQGPLKEHEVTIFVRRGGPNYQEGLRVMGEVGKTTGIPIHV  
FGTETHMTAIVGMALGHRPIPNQPPTAAHTANFLLNASGSTSTPAPSRTASFSESRA  
DEVAPAKKAKPAMPQDSVSPRSLQGKSTTLFSRHTKAIVWGMQTRAVQGMDFD  
YVCSRDEPSVAAMVYPFTGDHKQKFYWGHKEILIPVFKNMADAMRKHPEVDVLINF  
ASLSAYDSTMETMNYAQIRTI AIIAEGIPEALTRKLIKADQKGVTIIGPATVGGIKPG  
CFKIGNTGGMLDNILASKLYRPGSVAYVSRSGGMSNELNNISRTTDGVYEGVAIGG  
DRYPGSTFMDHVLRYQDTPGVKMIVVLGEIGGTEEYKICRGIKEGRLTKPIVCWCIGT  
CATMFSSEVQFGHAGACANQASETAVAKNQALKEAGVFVPRSFDELGEIIQSVYED  
LVANGVIVPAQEVPPTVPM DY SWARELGLIRKPASFMTSICDERGQELIYAGMPITE  
VFKEEMGIGGVLGLLWFQKRLPKYSCQFIEMCLMVTADHGPAVSGAHNTIICARAGK  
DLVSSLTSGLLTIGDRFGGALDAAAKMFSKAFDSGIIPMEFVNKMKKEGKLIMGIGHR  
VKSINNPDMRVQILKD YVRQHFPATPLLDYALEVEKITT SKKPNLILNVDGLIGVAFVD  
MLRNCGSFTREEADEYIDIGALNGIFVLGRSMGFIGHYLDQKRLKQGLYRHPWDDIS  
YVLPEHMSMTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Purity** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Stability** Stable for 3 months from receipt of products under proper storage and handling conditions.

**Storage** Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

**Concentration** 50 µg/mL as determined by BCA

**Storage Buffer** 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

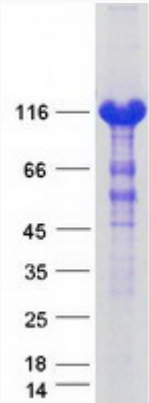
## GENE INFORMATION

**Gene Name** [ACLY ATP citrate lyase \[ Homo sapiens \(human\) \]](#)

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|                        |                                                                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Official Symbol</b> | ACLY                                                                                                                                         |
| <b>Synonyms</b>        | ACLY; ATP citrate lyase; ATP-citrate synthase; ACL; ATP citrate synthase; ATPCL; CLATP; citrate cleavage enzyme; ATP-citrate (pro-S-)-lyase; |
| <b>Gene ID</b>         | 47                                                                                                                                           |
| <b>mRNA Refseq</b>     | NM_001096                                                                                                                                    |
| <b>Protein Refseq</b>  | NP_001087                                                                                                                                    |
| <b>MIM</b>             | 108728                                                                                                                                       |
| <b>UniProt ID</b>      | P53396                                                                                                                                       |
| <b>SDS-PAGE</b>        |                                                          |