

## Active Recombinant Human ACLY Protein, GST-tagged

**Cat. No.** ACLY-420H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human ACLY fused with GST tag at the N-terminus was produced in Insect cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>           | Insect cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <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>Form</b>             | 45 mM Tris-HCl, pH 8.0, 124 mM NaCl, 2.4 mM KCl, 10% glycerol, and 3 mM DTT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Bio-activity</b>     | >300pmole/min/ug                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Molecular Mass</b>   | 147 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity</b>           | >86%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Applications</b>     | Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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**Storage**

At least 6 months at -80 centigrade. Avoid freeze/thaw cycles. Storing diluted enzyme is not recommended, if necessary, use carrier protein(BSA 0.1-0.5%).

**GENE INFORMATION**
**Gene Name**

ACLY ATP citrate lyase [ Homo sapiens ]

**Official Symbol**

ACLY

**Synonyms**

ACLY; ATP citrate lyase; ATP-citrate synthase; ACL; ATP citrate synthase; ATPCL; CLATP; citrate cleavage enzyme; ATP-citrate (pro-S-)-lyase;

**Gene ID**

47

**mRNA Refseq**

NM\_001096

**Protein Refseq**

NP\_001087

**MIM**

108728

**UniProt ID**

P53396

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