

## Product datasheet for PH300508

### ATP citrate lyase (ACLY) (NM\_001096) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ACLY MS Standard C13 and N15-labeled recombinant protein (NP_001087)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC200508
Predicted MW:	120.8 kDa
Protein Sequence:	>RC200508 protein sequence Red=Cloning site Green=Tags(s)

MSAKAISEQTGKELLYKFICTTSAIQNRFKYARVTPDTPDWARLLQDHPWLLSQNLVVKPDQLIKRRGKLG  
LVGVNLTLDGVKSWLKPRLGQEATVGKATGFLKNFLIEPFVPHSQAEFYVCIYATREGDYVLFHHEGGV  
DVGVDVDAKAQKLLVGVDEKLNPEDIKKHLLVHAPEDKKEILASFISGLFNFYEDLYFTYLEINPLVVTKD  
GVYVLDLAAKVDTADYICKVKWGDIEFPPPGREAYPEEAYIADLDAKSGASLKLTLNPKGRIWTMVA  
GGGASVVYSDTICDLGGVNELANYGEYS GAPSEQQTYDYAKTILSLMTREKHPDGKILIIIGGSIANFTNV  
AATFKGIVRAIRDYQGPKLKEHEVTIFVRRGGPNYQEGLRVMGEVGGTTGIPIHVFGTETHMTAIVGMALG  
HRP IPNQPTAAHTANFLLNASGSTSTPAPSRTASFSESRADEVAPAKKAKPAMPQDSVPSRSLQKST  
TLFSRHTKAIWGMQTRAVQGMDFDYVCSRDEPSVAAMVYPFTGDHKQKQFYWGHKEILIPVFKNMADAM  
RKHPEVDVLIINFASLRSAYDSTMETMNYAQIRTAIAIEGIPEALTRKLIKADQKGVTTIIGPATVGGIK  
PGCFKIGNTGGMLDNILASKLYRPGSVAYVSRSGGMSNELNIIISRTTDGVYEGVAIGGDRYPGSTFMDH  
VLRQYDTPGVKMIIVVLGEIGGTEEYKICRGIKEGRLTKPIVCWCIGTCATMFSSEVQFGHAGACANQASE  
TAVAKNQALKEAGVFVPRSFDELGEIIQSVYEDLVANGVIVPAQEVPPPTVPMDSWARELGLIRKPASF  
MTSICDERGQELIYAGMPITEVFKEEMGIGGVLGLLWFQKRLPKYSCQFIEMCLMVTADHGPAVSGAHT  
IICARAGKDLVSSLTSGLLTIGDRFGGALDAAKMFSAFDSGIIPMEFVNKMKKEGKIMGIGHRVKSI  
NNPDMRVQILKDYVRQHFPATPLLDYALEVEKITTSKKPNLILNVDGLIGVAFVDMRLRNCGSFTREEADE  
YIDIGALNGIFVLGRSMGFIGHYLDQKRLKQGLYRHPWDDISYVLPFHMSM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3



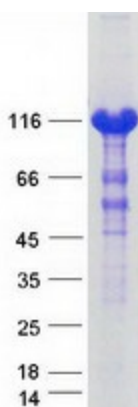
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<b>Storage:</b>	Store at -80°C. Avoid repeated freeze-thaw cycles.
<b>Stability:</b>	Stable for 3 months from receipt of products under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_001087</a>
<b>RefSeq Size:</b>	4450
<b>RefSeq ORF:</b>	3303
<b>Synonyms:</b>	ACL; ATPCL; CLATP
<b>Locus ID:</b>	47
<b>UniProt ID:</b>	<a href="#">P53396</a> , <a href="#">A0A024R1T9</a>
<b>Cytogenetics:</b>	17q21.2
<b>Summary:</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. [provided by RefSeq, Dec 2014]

**Protein Families:** Druggable Genome

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

### Product images:



Coomassie blue staining of purified ACLY protein (Cat# [TP300508]). The protein was produced from HEK293T cells transfected with ACLY cDNA clone (Cat# [RC200508]) using MegaTran 2.0 (Cat# [TT210002]).