

## Product datasheet for **TL306879**

### ATP citrate lyase (ACLY) Human shRNA Plasmid Kit (Locus ID 47)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	ATP citrate lyase (ACLY) Human shRNA Plasmid Kit (Locus ID 47)
Locus ID:	47
Synonyms:	ACL; ATPCL; CLATP
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	ACLY - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 47). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001096</a> , <a href="#">NM_001303274</a> , <a href="#">NM_001303275</a> , <a href="#">NM_198830</a> , <a href="#">NM_001096.1</a> , <a href="#">NM_001096.2</a> , <a href="#">NM_198830.1</a> , <a href="#">NM_001303275.1</a> , <a href="#">NM_001303274.1</a> , <a href="#">BC006195</a> , <a href="#">BC006195.2</a> , <a href="#">NM_001096.3</a>
UniProt ID:	<a href="#">P53396</a>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .

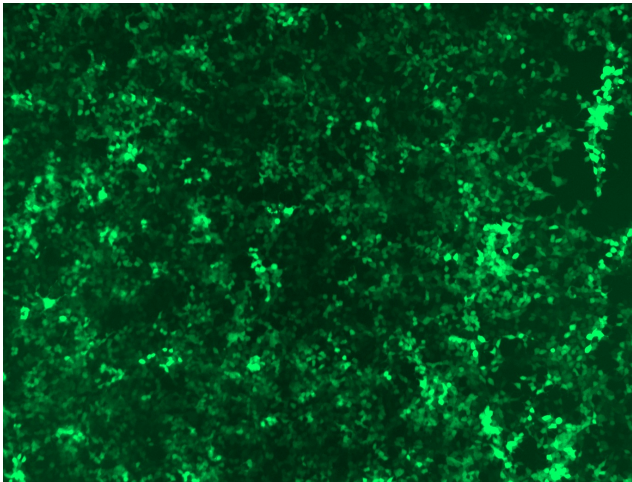


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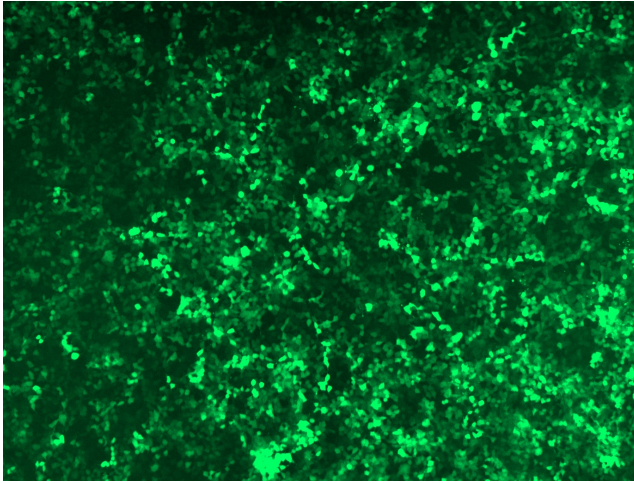
**Performance  
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

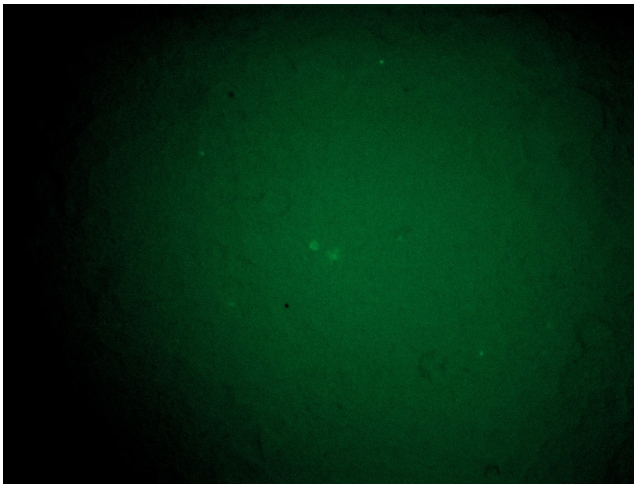
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

**Product images:**

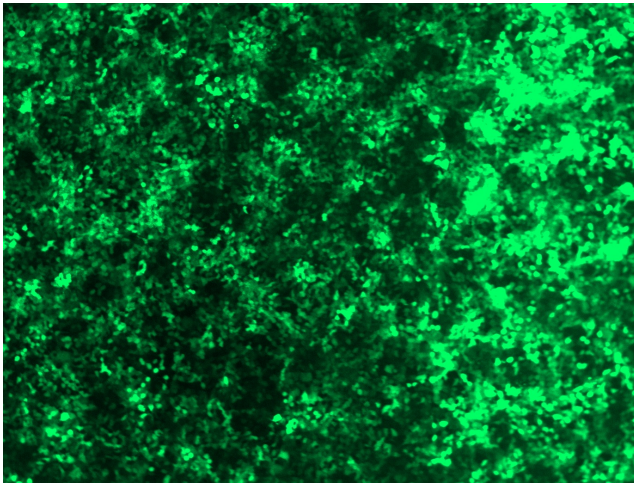
GFP signal was observed under microscope at 48 hours after transduction of TL306879A virus into HEK293 cells. TL306879A virus was prepared using lenti-shRNA TL306879A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL306879B virus into HEK293 cells. TL306879B virus was prepared using lenti-shRNA TL306879B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL306879C] virus into HEK293 cells. [TL306879C] virus was prepared using lenti-shRNA [TL306879C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL306879D] virus into HEK293 cells. [TL306879D] virus was prepared using lenti-shRNA [TL306879D] and [TR30037] packaging kit.