

## **Product datasheet for RC221682L3**

#### OriGene Technologies, Inc.

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### Leucyl tRNA synthetase (LARS) (NM\_020117) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Leucyl tRNA synthetase (LARS) (NM\_020117) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Leucyl tRNA synthetase

Synonyms: hr025Cl; HSPC192; ILFS1; LARS; LEURS; LEUS; LFIS; LRS; PIG44; RNTLS

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide T

The ORF insert of this clone is exactly the same as(RC221682).

Sequence:

Sgfl-Mlul

Restriction Sites: Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_020117

ORF Size: 3528 bp



#### Leucyl tRNA synthetase (LARS) (NM\_020117) Human Tagged Lenti ORF Clone - RC221682L3

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 020117.8</u>, <u>NP 064502.8</u>

 RefSeq Size:
 4248 bp

 RefSeq ORF:
 3531 bp

 Locus ID:
 51520

 UniProt ID:
 Q9P2|5

 Cytogenetics:
 5q32

**Domains:** tRNA-synt 1

**Protein Families:** Druggable Genome

**Protein Pathways:** Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis

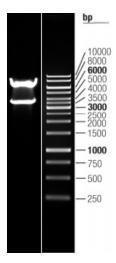
**MW:** 134.3 kDa

Gene Summary: This gene encodes a cytosolic leucine-tRNA synthetase, a member of the class I aminoacyl-

tRNA synthetase family. The encoded enzyme catalyzes the ATP-dependent ligation of L-leucine to tRNA(Leu). It is found in the cytoplasm as part of a multisynthetase complex and interacts with the arginine tRNA synthetase through its C-terminal domain. A mutation in this gene was found in affected individuals with infantile liver failure syndrome 1. Alternatively spliced transcript variants of this gene have been observed. [provided by RefSeq, Dec 2015]



# **Product images:**



Double digestion of RC221682L3 using Sgfl and Mlul