

## Recombinant Human LARS protein, His & T7-tagged

**Cat. No.** LARS-8208H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| <b>Product Overview</b> | Recombinant Human LARS aa. (Gly260~Glu509 (Accession # Q9P2J5)) fused with N-terminal His & T7 tag was produced in E. coli cells.                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>ProteinLength</b>    | Gly260~Glu509                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | 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. |
| <b>Form</b>             | Freeze-dried powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Molecular Mass</b>   | Predicted Molecular Mass: 31.5kDa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Endotoxin</b>        | <1.0EU per 1ug (determined by the LAL method)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Purity</b>           | >95%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Characteristic</b> | The isoelectric point is 8.3.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>   | SDS-PAGE; WB; ELISA; IP.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Stability</b>      | The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage Buffer</b> | Supplied as lyophilized form in 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative.                                                                                                                                                                                                                                                                                                                               |
| <b>Reconstitution</b> | Reconstitute in sterile ddH <sub>2</sub> O.                                                                                                                                                                                                                                                                                                                                                                                                                               |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                                                   |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | LARS leucyl-tRNA synthetase [ Homo sapiens (human) ]                                                                                                                                                                                                                                              |
| <b>Official Symbol</b> | LARS                                                                                                                                                                                                                                                                                              |
| <b>Synonyms</b>        | LARS; leucyl-tRNA synthetase; LRS; LEUS; LFIS; ILFS1; LARS1; LEURS; PIG44; RNTLS; HSPC192; hr025Cl; leucine--tRNA ligase, cytoplasmic; cytoplasmic leucyl-tRNA synthetase; cytosolic leucyl-tRNA synthetase; leucine tRNA ligase 1, cytoplasmic; leucine transase; proliferation-inducing gene 44 |
| <b>Gene ID</b>         | 51520                                                                                                                                                                                                                                                                                             |

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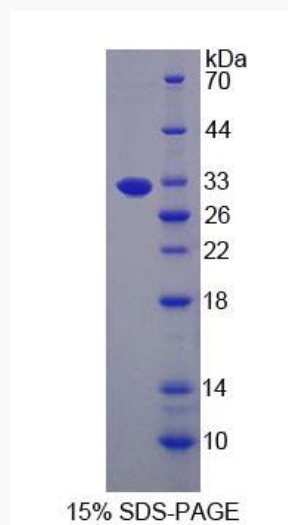
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mRNA Refseq [NM\\_001317964.1](#)

Protein Refseq [NP\\_001304893.1](#)

UniProt ID [Q9P2J5](#)

#### SDS-PAGE



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