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# LARS Antibody (N-term)
**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP11207a**

## Specification

### LARS Antibody (N-term) - Product Information

| | |
|---|---|
| Application | **WB, FC,E** |
| Primary Accession | Q9P2J5 |
| Other Accession | NP_064502 |
| Reactivity | **Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **134466** |
| Antigen Region | **176-205** |

### LARS Antibody (N-term) - Additional Information

**Gene ID** 51520

**Other Names**
Leucine--tRNA ligase, cytoplasmic, Leucyl-tRNA synthetase, LeuRS, LARS, KIAA1352

**Target/Specificity**
This LARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 176-205 amino acids from the N-terminal region of human LARS.

**Dilution**
WB~~1:1000
FC~~1:10~50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
LARS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### LARS Antibody (N-term) - Protein Information

**Name** LARS1 (HGNC:6512)

**Synonyms** KIAA1352, LARS

**Function** Aminoacyl-tRNA synthetase that catalyzes the specific attachment of leucine to its cognate tRNA (tRNA(Leu)) (PubMed:25051973, PubMed:32232361). It performs tRNA aminoacylation in a two-step reaction: Leu is initially activated by ATP to form a leucyl-adenylate (Leu-AMP) intermediate; then the leucyl moiety is transferred to the acceptor 3' end of the tRNA to yield leucyl-tRNA (PubMed:25051973). To improve the fidelity of catalytic reactions, it is also able to hydrolyze misactivated aminoacyl-adenylate intermediates (pre-transfer editing) and mischarged aminoacyl-tRNAs (post-transfer editing) (PubMed:25051973).

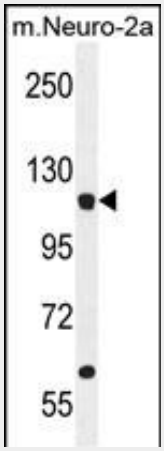
**Cellular Location**
Cytoplasm.

## LARS Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## LARS Antibody (N-term) - Images




LARS Antibody (N-term) (Cat. #AP11207a) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane).This demonstrates the LARS antibody detected the LARS protein (arrow).

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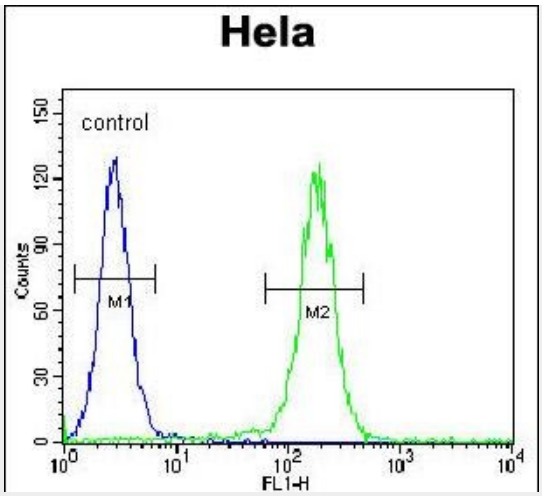


LARS Antibody (N-term) (Cat. #AP11207a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## LARS Antibody (N-term) - Background

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. Alternatively spliced transcript variants of this gene have been found; however, their full-length nature is not known.

## LARS Antibody (N-term) - References

Pang, Y.L., et al. Biochemistry 48(38):8958-8964(2009)
Seiradake, E., et al. J. Mol. Biol. 390(2):196-207(2009)
Shin, S.H., et al. Exp. Mol. Med. 40(2):229-236(2008)
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