

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

E~~Use at an assay dependent concentration.

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

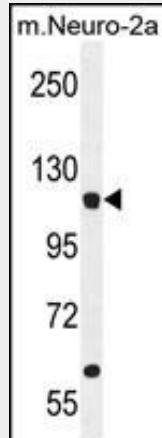
Cytoplasm.

LARS Antibody (N-term) - Protocols

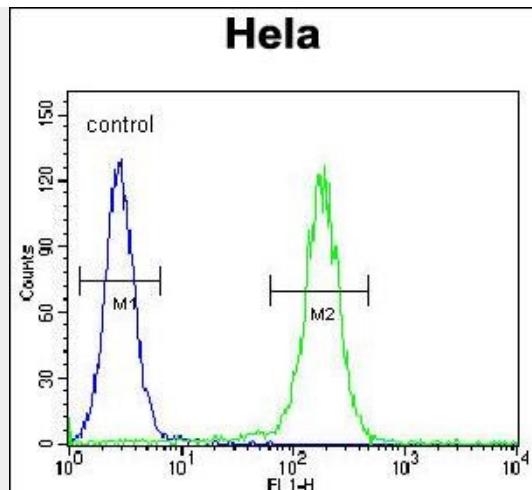
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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).



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)
Maeso, E., et al. Neuromuscul. Disord. 17(5):415-418(2007)
Lue, S.W., et al. Biochemistry 46(15):4466-4472(2007)