10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LARS Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11207a

Product Information

Application	WB, FC, E
Primary Accession	Q9P2J5
Other Accession	NP_064502
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14919
Calculated MW	134466
Antigen Region	176-205

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.

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.

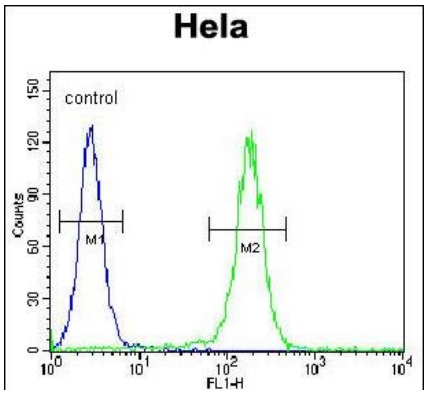
Background

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.

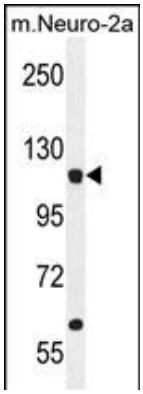
References

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Maeso, E., et al. Neuromuscul. Disord. 17(5):415-418(2007)
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Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.