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

LARS Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP11207a

Specification

LARS Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9P2J5

LARS Antibody (N-term) Blocking peptide - Additional Information

Gene ID 51520

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LARS Antibody (N-term) Blocking peptide - 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.

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

LARS Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

LARS Antibody (N-term) Blocking peptide - Images

LARS Antibody (N-term) Blocking peptide - Background

This gene encodes a cytosolic leucine-tRNA synthetase, amember of the class I aminoacyl-tRNA synthetase family. The encodedenzyme catalyzes the ATP-dependent ligation of L-leucine totRNA(Leu). It is found in the cytoplasm as part of amultisynthetase complex and interacts with the arginine tRNAsynthetase through its C-terminal domain. Alternatively splicedtranscript variants of this gene have been found; however, theirfull-length nature is not known.

LARS Antibody (N-term) Blocking peptide - 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)