

### LARS Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP11207a

### **Specification**

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

**Primary Accession** 

**09P2I5** 

## 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:<a href="http://www.uniprot.org/citations/25051973" target="\_blank">25051973</a>, PubMed:<a href="http://www.uniprot.org/citations/32232361" target="\_blank">32232361</a>). 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:<a href="http://www.uniprot.org/citations/25051973" target="\_blank">25051973</a>). 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:<a href="http://www.uniprot.org/citations/25051973" target="\_blank">25051973</a><a href="http://www.un

### **Cellular Location**

Cytoplasm.



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)