

**LARS Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7413b****Specification**

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**LARS Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [O9P2J5](#)**LARS Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 51520**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7413b](/products/AP7413b) was selected from the C-term region of human LARS. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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 (C-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: <http://www.uniprot.org/citations/25051973> target="\_blank">25051973</a>, PubMed: <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: <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: <http://www.uniprot.org/citations/25051973> target="\_blank">25051973</a>).

**Cellular Location**

Cytoplasm.

**LARS Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**LARS Antibody (C-term) Blocking Peptide - Images****LARS Antibody (C-term) Blocking Peptide - Background**

LARS, a cytosolic leucine-tRNA synthetase, a member of the class I aminoacyl-tRNA synthetase family. This 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.

**LARS Antibody (C-term) Blocking Peptide - References**

Lue,S.W.; Biochemistry 46 (15), 4466-4472 (2007)Ling,C., J. Biol. Chem. 280 (41), 34755-34763 (2005)Giles,R.E., Somatic Cell Genet. 6 (5), 667-687 (1980)