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

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

Specification

LARS Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9P2J5

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 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: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 (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)