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

Leucyl tRNA synthetase Rabbit pAb

Catalog # AP98863

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9P2J5
Other Accession	Q9P2J5
Reactivity	Human, Mouse
Predicted	Rat, Pig, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	134466
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Leucyl tRNA synthetase
Epitope Specificity	201-300/1176
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the class-I aminoacyl-tRNA synthetase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	51520
Other Names	HSPC192; ILFS1; LARS; LEURS; LEUS; LFIS; LRS; PIG44; RNTLS; cLRS; hr025Cl; 2310045K21Rik; 3110009L02Rik; SYLC_HUMAN; LARS1; Leucyl-tRNA synthetase (LeuRS | cLRS); 6.1.1.4; KIAA1352; SYLC_MOUSE; Leucyl-tRNA synthetase (LeuRS); leucyl-tRNA synthetase 1; leucyl-tRNA synthetase; leucine tRNA ligase 1, cytoplasmic
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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