

LARS Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7413b**Specification**

LARS Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q9P2J5
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	134466
Antigen Region	1118-1145

LARS Antibody (C-term) - Additional Information**Gene ID** 51520**Other Names**

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

Target/Specificity

This LARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1118-1145 amino acids from the C-terminal region of human LARS.

Dilution

WB~~1:1000

IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LARS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

LARS Antibody (C-term) - 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

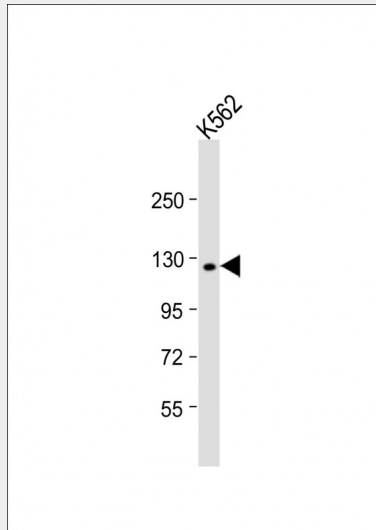
Cytoplasm.

LARS Antibody (C-term) - Protocols

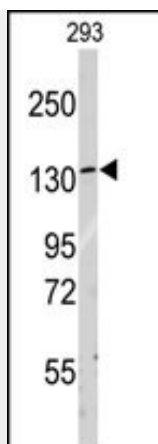
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

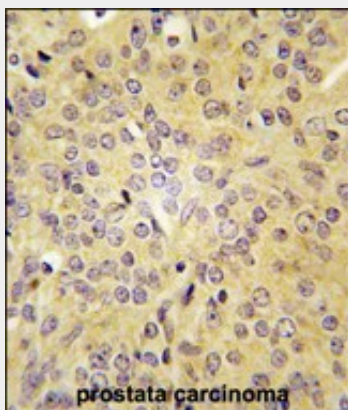
LARS Antibody (C-term) - Images



Anti-LARS Antibody (C-term) at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 134 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of anti-LARS Antibody (C-term) (Cat.#AP7413b) in 293 cell line lysates (35ug/lane). LARS (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human prostate carcinoma tissue reacted with LARS antibody (C-term) (Cat.#AP7413b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

LARS Antibody (C-term) - 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) - 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)