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

Specification

LARS Antibody (C-term) - Product Information

Application	**IHC-P, WB,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
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

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).

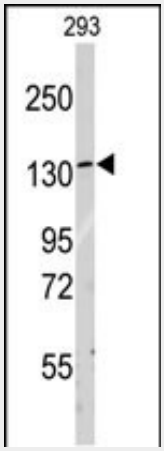
Cellular Location
Cytoplasm.

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 Cytomety
- Cell Culture

LARS Antibody (C-term) - Images



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.

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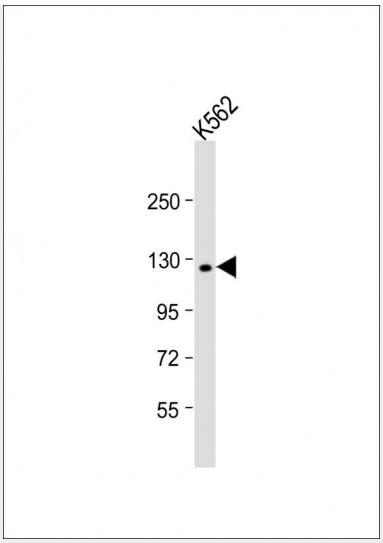
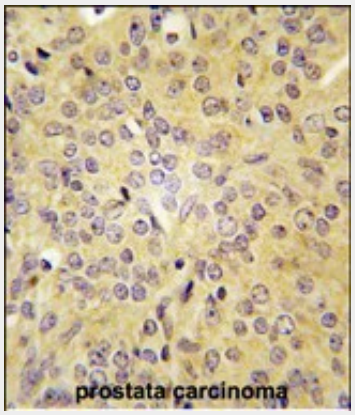


Anti-LARS Antibody (C-term) at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 134 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human prostata 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)