10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

AARS2 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7559c

Specification

AARS2 Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q5JTZ9
Other Accession	A2RRN5
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**107340**
Antigen Region	**366-394**

AARS2 Antibody (Center) - Additional Information

Gene ID 57505

Other Names
Alanine--tRNA ligase, mitochondrial {ECO:0000255|HAMAP-Rule:MF_03133}, 6117 {ECO:0000255|HAMAP-Rule:MF_03133}, Alanyl-tRNA synthetase {ECO:0000255|HAMAP-Rule:MF_03133}, AlaRS {ECO:0000255|HAMAP-Rule:MF_03133}, AARS2 {ECO:0000255|HAMAP-Rule:MF_03133}

Target/Specificity
This AARS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 366-394 amino acids from the Central region of human AARS2.

Dilution
WB~~1:1000
IHC-P~~1:10~50
FC~~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
AARS2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AARS2 Antibody (Center) - Protein Information

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Name AARS2 {ECO:0000255|HAMAP-Rule:MF_03133}

Synonyms AARSL, KIAA1270

Function Catalyzes the attachment of alanine to tRNA(Ala) in a two- step reaction: alanine is first activated by ATP to form Ala-AMP and then transferred to the acceptor end of tRNA(Ala). Also edits incorrectly charged tRNA(Ala) via its editing domain.

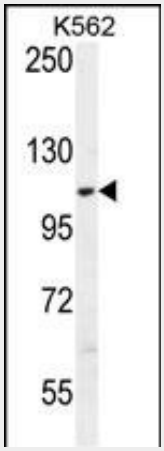
Cellular Location
Mitochondrion {ECO:0000255|HAMAP-Rule:MF_03133, ECO:0000269|PubMed:21549344}

AARS2 Antibody (Center) - 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

AARS2 Antibody (Center) - Images



AARS2 Antibody (Center) (Cat.#AP7559c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the AARS2 antibody detected the AARS2 protein (arrow).

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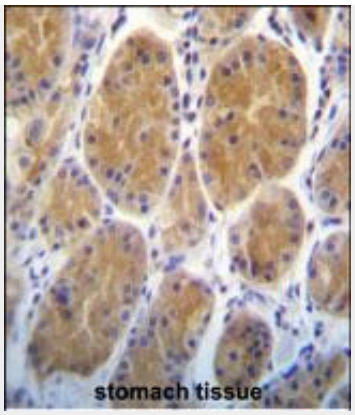
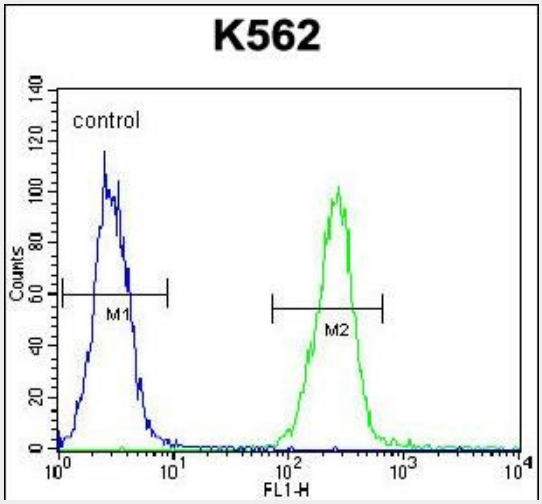


AARS2 Antibody (Center) (Cat. #AP7559c)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of AARS2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



AARS2 Antibody (Center) (Cat. #AP7559c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

AARS2 Antibody (Center) - Background

Alanyl-tRNA synthetase 2 (AARS2) is an enzyme that catalyzes the chemical reaction:

ATP + L-alanine + tRNAAla
AMP + diphosphate + L-alanyl-tRNAAla.

This enzyme participates in alanine and aspartate metabolism and aminoacyl-tRNA biosynthesis.

AARS2 Antibody (Center) - References

Bonnefond,L.,Biochemistry 44 (12), 4805-4816 (2005)
Nakayama,M., Genome Res. 12 (11), 1773-1784 (2002)