

AARS2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56084

Specification

AARS2 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	O5JTZ9
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	107340

AARS2 Polyclonal Antibody - Additional Information

Gene ID 57505

Other Names

Alanine--tRNA ligase, mitochondrial {ECO:0000255|HAMAP-Rule:MF_03133}, 6.1.1.7
{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}, AARSL, KIAA1270

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

AARS2 Polyclonal Antibody - Protein Information

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 (PubMed:21549344). In presence of high levels of lactate, also acts as a protein lacyltransferase that mediates lacylation of lysine residues in target proteins, such as CGAS (PubMed:39322678). Acts as an inhibitor of cGAS/STING signaling by catalyzing lacylation of CGAS, preventing the formation of liquid-like droplets in which CGAS is activated (PubMed:39322678).

Cellular Location

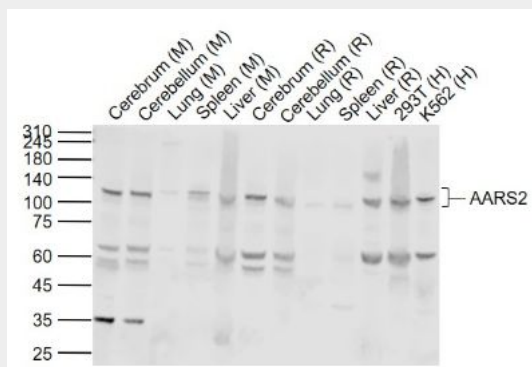
Mitochondrion {ECO:0000255|HAMAP-Rule:MF_03133, ECO:0000269|PubMed:21549344}

AARS2 Polyclonal Antibody - 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](#)

AARS2 Polyclonal Antibody - Images



Sample:

- Lane 1: Cerebrum (Mouse) Lysate at 40 ug
 - Lane 2: Cerebellum (Mouse) Lysate at 40 ug
 - Lane 3: Lung (Mouse) Lysate at 40 ug
 - Lane 4: Spleen (Mouse) Lysate at 40 ug
 - Lane 5: Liver (Mouse) Lysate at 40 ug
 - Lane 6: Cerebrum (Rat) Lysate at 40 ug
 - Lane 7: Cerebellum (Rat) Lysate at 40 ug
 - Lane 8: Lung (Rat) Lysate at 40 ug
 - Lane 9: Spleen (Rat) Lysate at 40 ug
 - Lane 10: Liver (Rat) Lysate at 40 ug
 - Lane 11: 293T (Human) Cell Lysate at 30 ug
 - Lane 12: K562 (Human) Cell Lysate at 30 ug
- Primary: Anti-AARS2 (bs-1603R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 107 kD
Observed band size: 110 kD