

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

**Specification**

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**AARS2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O5JTZ9</a>
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:<a href="http://www.uniprot.org/citations/21549344" target="\_blank">21549344</a>). 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:<a href="http://www.uniprot.org/citations/39322678" target="\_blank">39322678</a>). 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:<a href="http://www.uniprot.org/citations/39322678" target="\_blank">39322678</a>).

## Cellular Location

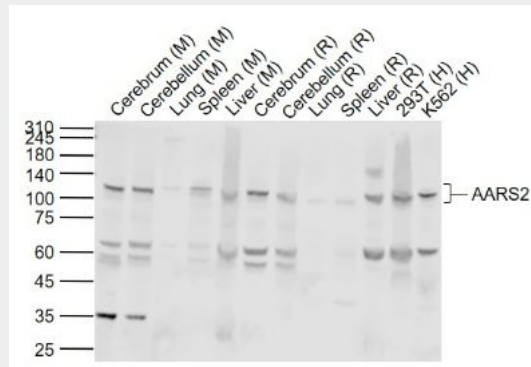
Mitochondrion {ECO:0000255|HAMAP-Rule:MF\_03133, ECO:0000269|PubMed:21549344}

## 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