

# Arginyl tRNA synthetase Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54873

### **Specification**

Physical State

## **Arginyl tRNA synthetase Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>P54136</u>

Reactivity
Host
Clonality
Calculated MW
Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
75 KDa

Immunogen KLH conjugated synthetic peptide derived

Liquid

laG

from human Arginyl tRNA synthetase

Epitope Specificity 401-500/660

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm.

SIMILARITY Belongs to the class-I aminoacyl-tRNA

synthetase family.

SUBUNIT Interacts (via N-terminus) with AIMP1 (via

N-terminus); this stimulates its catalytic activity. Interacts (via N-terminus) with LARS2 (via C-terminus). Monomer; also part of a multisubunit complex that groups tRNA ligases for Arg, Asp, Glu, Gln, Ile,

thina ligases for Arg, Asp, Glu, Gill, Il

Leu, Lys, Met and Pro.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

### **Background Descriptions**

Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Arginyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family. [provided by RefSeq, Jul 2008]

#### Arginyl tRNA synthetase Polyclonal Antibody - Additional Information

**Gene ID** 5917

## **Other Names**

Arginine--tRNA ligase, cytoplasmic, 6.1.1.19, Arginyl-tRNA synthetase, ArgRS, RARS1 (<a href="http://www.genenames.org/cgi-bin/gene symbol report?hgnc id=9870"



target=" blank">HGNC:9870</a>), RARS

#### **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class ="dilution\_ICC">ICC~~N/A</span><br \> <span class ="dilution\_E">E~~N/A</span>

## **Storage**

Store at -20  $^{\circ}$ 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  $^{\circ}$ C.

## Arginyl tRNA synthetase Polyclonal Antibody - Protein Information

Name RARS1 (HGNC:9870)

**Synonyms RARS** 

#### **Function**

Forms part of a macromolecular complex that catalyzes the attachment of specific amino acids to cognate tRNAs during protein synthesis (PubMed:<a href="http://www.uniprot.org/citations/25288775" target="\_blank">25288775</a>). Modulates the secretion of AIMP1 and may be involved in generation of the inflammatory cytokine EMAP2 from AIMP1 (PubMed:<a href="http://www.uniprot.org/citations/17443684" target=" blank">17443684</a>).

## **Cellular Location**

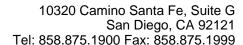
Cytoplasm. Cytoplasm, cytosol

## **Arginyl tRNA synthetase Polyclonal Antibody - Protocols**

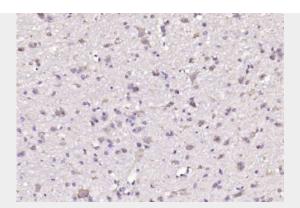
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Arginyl tRNA synthetase Polyclonal Antibody - Images







Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Arginyl tRNA synthetase) Polyclonal Antibody, Unconjugated (bs-12516R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.