

For Research Use Only

# AlaRS Polyclonal antibody

Catalog Number:17394-1-AP

Featured Product

3 Publications



## Basic Information

### Catalog Number:

17394-1-AP

### Concentration:

400 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG11294

### GenBank Accession Number:

BC011451

### GeneID (NCBI):

16

### UNIPROT ID:

P49588

### Full Name:

alanyl-tRNA synthetase

### Calculated MW:

968 aa, 107 kDa

### Observed MW:

107 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:20-1:200

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, CoIP

### Species Specificity:

human

### Cited Species:

human

### Positive Controls:

WB : HepG2 cells, Jurkat cells

IP : HepG2 cells,

IHC : human liver tissue,

IF/ICC : HepG2 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

AARS(alanyl-tRNA synthetase) is also named as AlaRS(alanine tRNA ligase 1, cytoplasmic), renal carcinoma antigen NY-REN-42 and belongs to the class-II aminoacyl-tRNA synthetase family. It can interpret the RNA code and attach specific aminoacids to the tRNAs that contain the cognate trinucleotide anticodons. AARS consists of three domains: the N-terminal catalytic domain, the editing domain and the C-terminal C-Ala domain. The editing domain removes incorrectly charged amino acids, while the C-Ala domain, along with tRNA(Ala), serves as a bridge to cooperatively bring together the editing and aminoacylation centers thus stimulating deacylation of misacylated tRNAs(PMID:19661429).

## Notable Publications

Author	Pubmed ID	Journal	Application
Matthew D Tyl	39772686	Sci Adv	WB
Li Wang	39645025	Cancer Lett	CoIP
Lingling Li	36991000	Nat Commun	WB,IHC

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

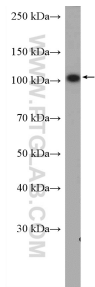
T: 4006900926

E: Proteintech-CN@ptglab.com

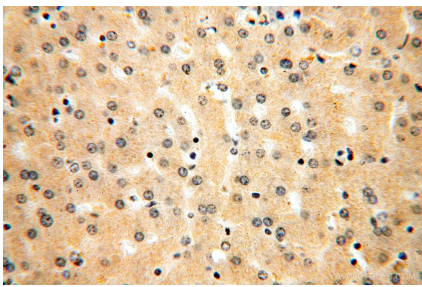
W: ptgcn.com

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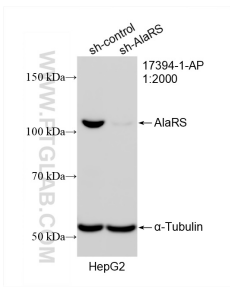
Selected Validation Data



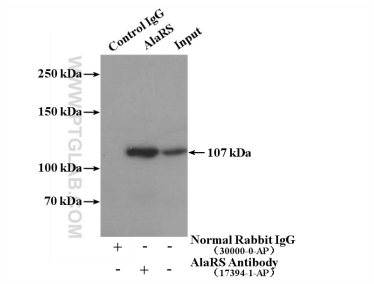
HepG2 cells were subjected to SDS PAGE followed by western blot with 17394-1-AP (AlaRS antibody at dilution of 1:1500 incubated at room temperature for 1.5 hours).



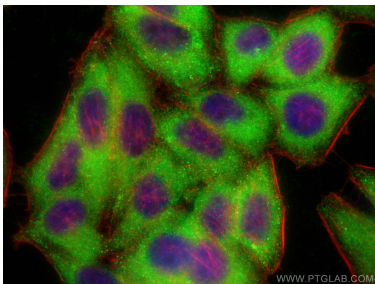
Immunohistochemical analysis of paraffin-embedded human liver using 17394-1-AP (AlaRS antibody) at dilution of 1:100 (under 40x lens).



WB result of AlaRS antibody (17394-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AlaRS transfected HepG2 cells.



IP result of anti-AlaRS (IP:17394-1-AP, 4ug; Detection:17394-1-AP 1:500) with HepG2 cells lysate 2400ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using AlaRS antibody (17394-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).