

For Research Use Only

# TARS Polyclonal antibody

Catalog Number: 14773-1-AP

3 Publications



## Basic Information

### Catalog Number:

14773-1-AP

### Size:

150ul, Concentration: 200 ug/ml by Nanodrop and 133 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6614

### GenBank Accession Number:

BC000517

### GeneID (NCBI):

6897

### UNIPROT ID:

P26639

### Full Name:

threonyl-tRNA synthetase

### Calculated MW:

83 kDa

### Observed MW:

66-72 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

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

IHC 1:100-1:400

IF/ICC 1:10-1:100

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IP

### Species Specificity:

human

### Cited Species:

human

### Positive Controls:

WB : A549 cells,

IP : A549 cells,

IHC : human breast cancer tissue,

IF/ICC : MCF-7 cells, Hela cells, 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

TARS (Threonyl-tRNA synthetase), also known as threonine-tRNA ligase or ThrRS, belongs to the aminoacyl-tRNA synthetase family. Aminoacyl-tRNA synthetase (aaRS) catalyzes the specific esterification of an amino acid with the 3'-terminal hydroxyl group of its cognate tRNA. Specificity of aminoacylation catalyzed by aaRSs ensures the accurate translation of the genetic code in the first step of protein synthesis (PMID: 26324710). TARS has some isoforms with the molecular mass of 83, 87 kDa and other MW.

## Notable Publications

Author	Pubmed ID	Journal	Application
Kai-Fa Teo	36271647	Clin Transl Sci	WB,IP
Sung-Hoon Kim	33340489	Mol Cell	WB
Lingling Li	36991000	Nat Commun	WB

## 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

\*\*\* 20ul sizes contain 0.1% BSA

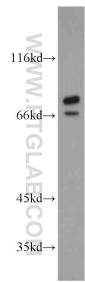
For technical support and original validation data for this product please contact:

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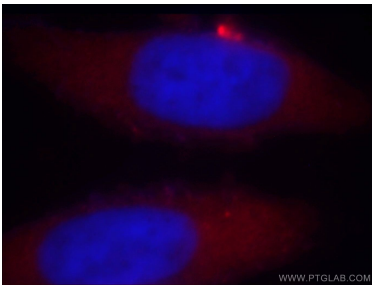
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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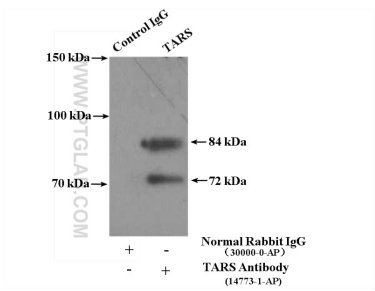
Selected Validation Data



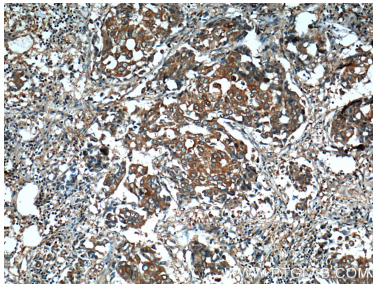
A549 cells were subjected to SDS PAGE followed by western blot with 14773-1-AP (TARS antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



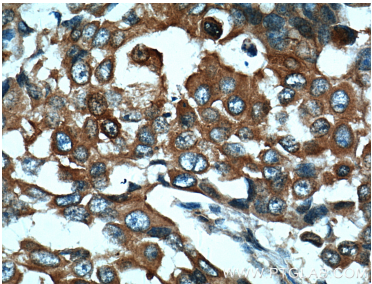
Immunofluorescent analysis of MCF-7 cells, using TARS antibody 14773-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



IP result of anti-TARS (IP:14773-1-AP, 4ug; Detection:14773-1-AP 1:500) with A549 cells lysate 2400ug.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14773-1-AP (TARS Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14773-1-AP (TARS Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).