

For Research Use Only

# TrpRS Polyclonal antibody

Catalog Number: 16081-1-AP

Featured Product

3 Publications



## Basic Information

### Catalog Number:

16081-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9079

### GenBank Accession Number:

BC017489

### GeneID (NCBI):

7453

### UNIPROT ID:

P23381

### Full Name:

tryptophanyl-tRNA synthetase

### Calculated MW:

471 aa, 53 kDa

### Observed MW:

53 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

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

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human

### Positive Controls:

WB: HeLa cells, HEK-293T cells, HepG2 cells, Jurkat cells, JAR cells

IP: HepG2 cells,

IHC: human ovary tumor tissue, human colon cancer 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

TrpRS is also named as IFI53, WRS, WARS and belongs to the class-I aminoacyl-tRNA synthetase family. It catalyzes activation of tryptophan by ATP and transfer to tRNA<sup>Trp</sup>, ensuring translation of the genetic code for tryptophan. TrpRS is thought to be more closely related to TyrRS than to any other class I enzyme, but the significance of this relationship has been questioned (PMID:7743129). It can exist as a dimer (PMID:7743129). It has 2 isoforms produced by alternative splicing.

## Notable Publications

Author	Pubmed ID	Journal	Application
Rui Qin	34326168	J Immunother Cancer	WB
Huan Zeng	39027431	Heliyon	IHC
Wen-Xing Sun	38212570	Cell Mol Life Sci	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

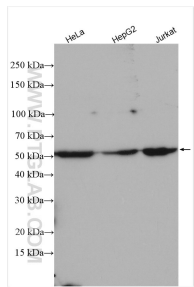
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

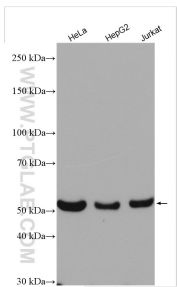
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

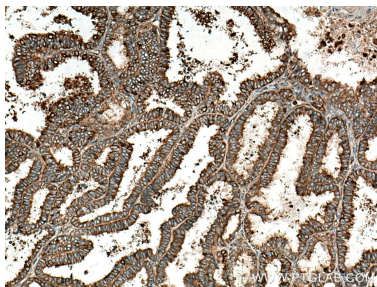
Selected Validation Data



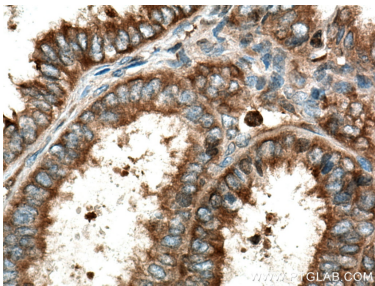
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



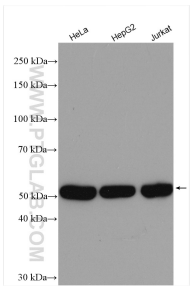
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



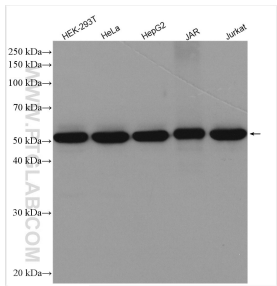
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16081-1-AP (TrpRS antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



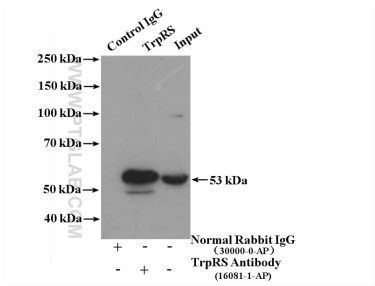
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16081-1-AP (TrpRS antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



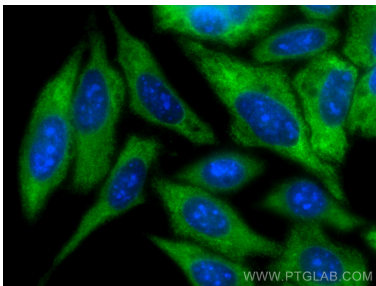
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



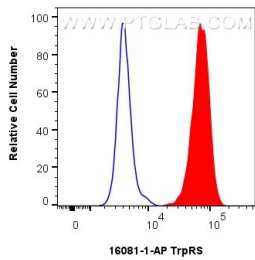
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-TrpRS (IP:16081-1-AP, 4ug; Detection:16081-1-AP 1:500) with HepG2 cells lysate 3000ug.



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using TrpRS antibody (16081-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.25 ug TrpRS Polyclonal antibody (16081-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).