

For Research Use Only

# TrpRS Polyclonal antibody

Catalog Number: 16081-1-AP

Featured Product

2 Publications



## Basic Information

**Catalog Number:**

16081-1-AP

**Size:**

150ul , Concentration: 500 µg/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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:10-1:100

## Applications

**Tested Applications:**

FC, IF, IHC, IP, WB, ELISA

**Cited Applications:**

WB

**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** : 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 IF153, 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
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

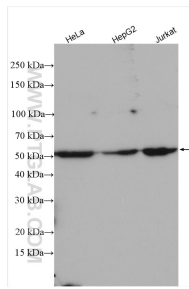
For technical support and original validation data for this product please contact:

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

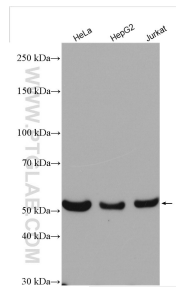
E: proteintech@ptglab.com  
W: ptglab.com

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

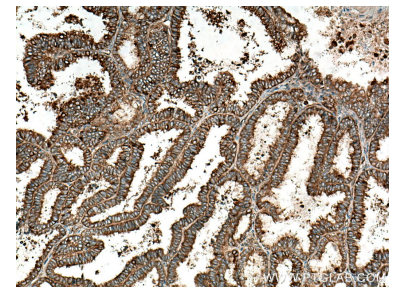
## Selected Validation Data



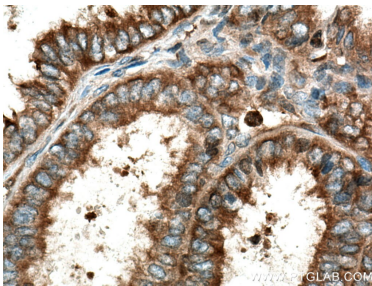
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



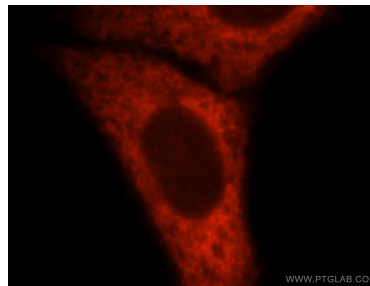
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



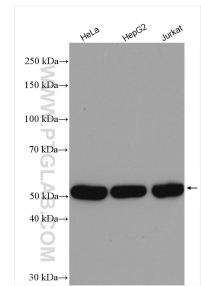
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16081-1-AP (TrpRS antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



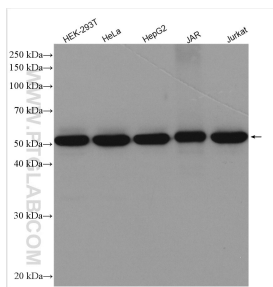
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 16081-1-AP (TrpRS antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



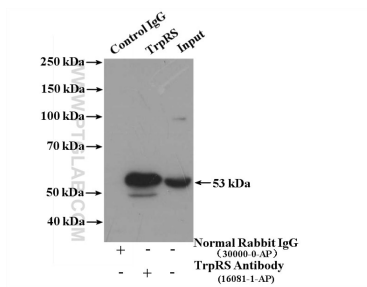
Immunofluorescent analysis of HepG2 cells, using WARS antibody 16081-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



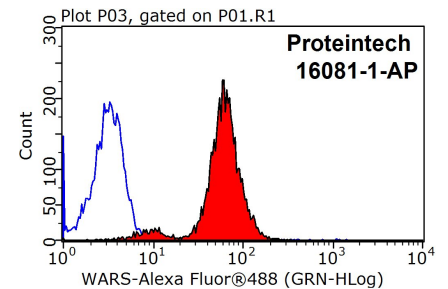
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



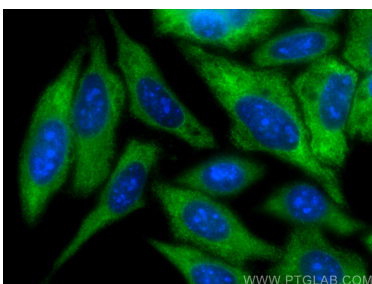
Various lysates were subjected to SDS PAGE followed by western blot with 16081-1-AP (TrpRS antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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



1X10<sup>6</sup> HepG2 cells were stained with 0.2ug TrpRS antibody (16081-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



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).