

For Research Use Only

# GlnRS Polyclonal antibody

Catalog Number: 12645-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

12645-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop and 400 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3375

### GenBank Accession Number:

BC016634

### GeneID (NCBI):

5859

### UNIPROT ID:

P47897

### Full Name:

glutaminyl-tRNA synthetase

### Calculated MW:

775 aa, 88 kDa

### Observed MW:

88 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:8000

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

IHC 1:500-1:1500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, RIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human

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

### Positive Controls:

WB : HeLa cells, HepG2 cells, NIH/3T3 cells, PC-3 cells

IP : PC-3 cells,

IHC : human prostate cancer tissue,

IF/ICC : HeLa cells, PC-3 cells

## Background Information

GlnRS (glutaminyl-tRNA synthetase) is a class I aminoacyl-tRNA synthetase. Aminoacyl-tRNA synthetases are enzymes that charge tRNAs with their cognate amino acids. The specificity of this reaction determines the fidelity of mRNA translation. At least 1 synthetase exists in the cytoplasm for each amino acid. GlnRS is present in eukaryotes but is absent from many prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by transamidation of the misacylated Glu-tRNA(Gln) (PMID:8078941).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xinping Lu	33073493	EMBO Rep	WB, RIP
Maria C Passarelli	35288656	Nat Cell Biol	WB
Haissi Cui	33341895	Nucleic Acids Res	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

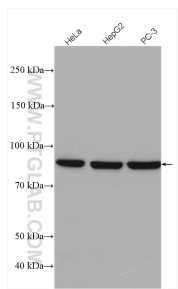
For technical support and original validation data for this product please contact:

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

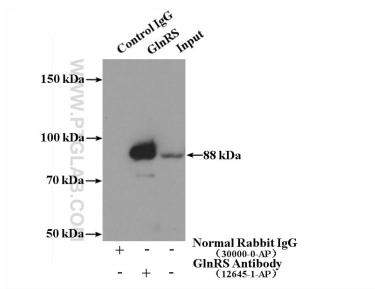
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

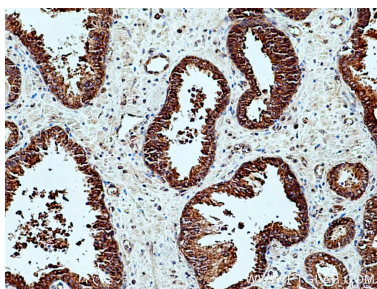
Selected Validation Data



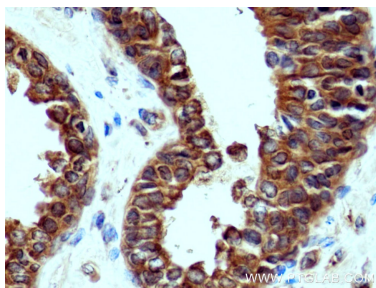
Various lysates were subjected to SDS PAGE followed by western blot with 12645-1-AP (GlnRS antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



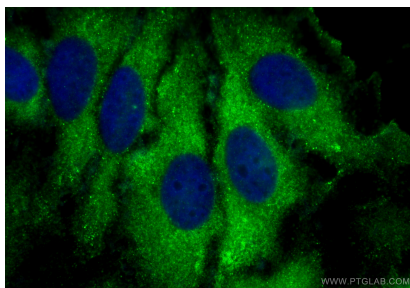
IP result of anti-GlnRS (IP:12645-1-AP, 4ug; Detection:12645-1-AP 1:500) with PC-3 cells lysate 3200ug.



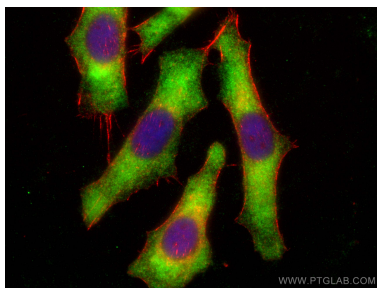
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 12645-1-AP (GlnRS antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 12645-1-AP (GlnRS antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using GlnRS antibody (12645-1-AP) at dilution of 1:400 and Multi-rAb Coralite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using GlnRS antibody (12645-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).