

For Research Use Only

# EPRS Monoclonal antibody

Catalog Number: 67712-1-Ig **1 Publications**



## Basic Information

<b>Catalog Number:</b> 67712-1-Ig	<b>GenBank Accession Number:</b> BC126275	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 500 µg/ml	<b>GeneID (NCBI):</b> 2058	<b>CloneNo.:</b> 1B7G2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P07814	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000 IF 1:50-1:500
<b>Isotype:</b> IgG2a	<b>Full Name:</b> glutamyl-prolyl-tRNA synthetase	
<b>Immunogen Catalog Number:</b> AG19184	<b>Calculated MW:</b> 1512 aa, 171 kDa	
	<b>Observed MW:</b> 171 kDa	

## Applications

**Tested Applications:**  
IF/ICC, IHC, WB, ELISA

**Cited Applications:**  
WB, IF, IHC

**Species Specificity:**  
Human, rat, mouse

**Cited Species:**  
human, mouse

**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:** HT-29 cells, HSC-T6 cells, NIH/3T3 cells, PC-12 cells, HeLa cells, HEK-293 cells, HepG2 cells, LNCaP cells, Jurkat cells

**IHC:** human lung cancer tissue,

**IF:** HeLa cells,

## Background Information

Human EPRS is a 172 kDa, 1512 amino acid polypeptide consisting of three major domains. The N and C termini contain ERS and PRS catalytic domains, respectively, joined by a 300 amino acid linker containing three tandem WHEP-TRS (referred to as WHEP) domains. EPRS is a bifunctional aminoacyl-tRNA synthetase that catalyzes the aminoacylation of glutamic acid and proline tRNA species. EPRS has a special role in GAIT-mediated translational control, as it is solely responsible for recognition and interaction with GAIT elements in target mRNAs. (PMID: 29576217, PMID: 22386318, PMID: 19647514)

## Notable Publications

Author	Pubmed ID	Journal	Application
Li-Qi Lin	38243370	Kaohsiung J Med Sci	WB, IF, IHC

## Storage

**Storage:**  
Store at -20°C.  
**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:

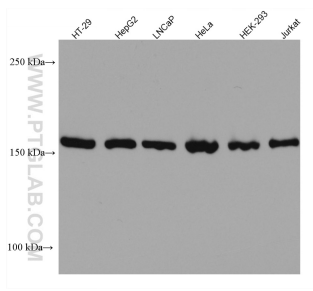
T: 4006900926

E: Proteintech-CN@ptglab.com

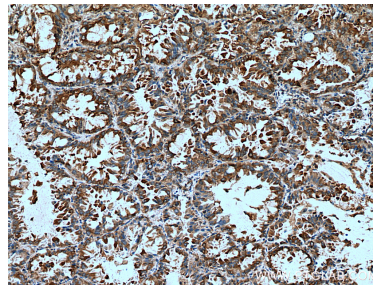
W: ptgcn.com

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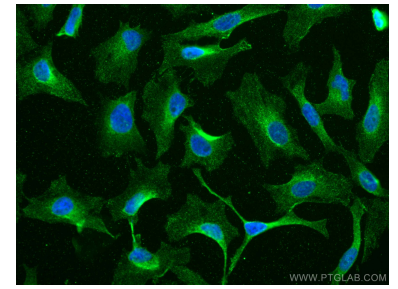
## Selected Validation Data



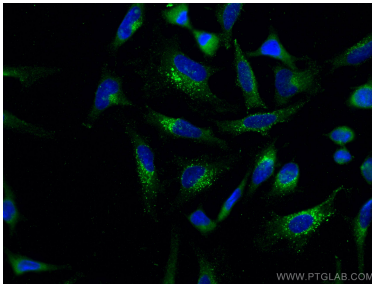
Various lysates were subjected to SDS PAGE followed by western blot with 67712-1-Ig (EPRS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 67712-1-Ig (EPRS antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using EPRS antibody (67712-1-Ig, Clone: 1B7G2) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using EPRS antibody (67712-1-Ig, Clone: 1B7G2) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). DAPI (blue).