## For Research Use Only

## EPRS Monoclonal antibody

Catalog Number:67712-1-lg 1 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 67712-1-lg BC126275 GeneID (NCBI): Size: 500 μg/ml 2058

**UNIPROT ID:** Source: Mouse P07814 Isotype: Full Name: IgG2a glutamyl-prolyl-tRNA synthetase

Immunogen Catalog Number:

AG19184

Observed MW: 171 kDa

Calculated MW:

1512 aa, 171 kDa

**Purification Method:** 

Protein A purification

CloneNo.: 1B7G2

Recommended Dilutions:

WB 1:5000-1:50000

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

protein lysate IHC 1:500-1:2000 IF/ICC 1:50-1:500

**Applications** 

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

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

IP: HeLa cells,

IHC: human lung cancer tissue,

IF/ICC: 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** 

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

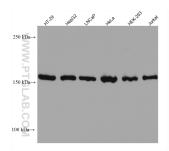
Storage

Store at -20°C. Stable for one year after shipment.

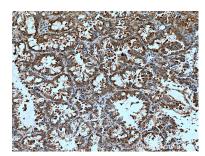
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

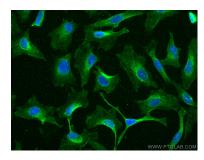
## **Selected Validation Data**



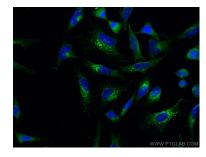
Various lysates were subjected to SDS PAGE followed by western blot with 67712-1-1g (EPRS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



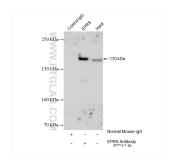
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 67712-1-1g (EPRS antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



IP result of anti-EPRS (IP:67712-1-Ig, 4ug; Detection:67712-1-Ig 1:10000) with HeLa cells lysate 1085 ug.