For Research Use Only

## GARS Monoclonal antibody, PBS Only

Catalog Number: 67893-1-PBS

**Featured Product** 



**Basic Information** 

Catalog Number:

GenBank Accession Number: BC007755

**Purification Method:** Protein A purification

67893-1-PBS Size:

GeneID (NCBI):

CloneNo.:

1 mg/ml Source:

2617 **UNIPROT ID:** 

P41250

2H9D3

Mouse Isotype:

Full Name: glycyl-tRNA synthetase

Immunogen Catalog Number:

Calculated MW:

739 aa, 83 kDa

AG8432

IgG2a

Observed MW: 75-80 kDa

**Applications** 

**Tested Applications:** 

WB,Indirect ELISA,IHC,IF

Species Specificity:

Human, mouse, rat

## **Background Information**

Glycyl-tRNA synthetase 1 (GARS, Genel D:2617) is one of the aminoacyl-tRNA synthetases. It is essential for protein synthesis in all cells and tissues (PMID: 17035524) and charges tRNA molecules with glycine by catalyzing the ATPdependent ligation of glycine to the 3'-end of it's cognate tRNA via the formation of an aminoacyl-adenylate intermediate (Gly-AMP) (PMID: 17544401, PMID: 28675565, PMID: 24898252) . GARS is located in cytoplasm, but also can be secreted from cells and as an extracellular protein which may influence cell signaling. Mutation of GARS causes peripheral neuropathies such as CMT2D, SMA (PMID: 26503042, PMID: 32181591), or associates with cancer. Two transcript variants encoding different isoforms have been found for this gene. The molecular weight of isoform2 is about 78 kDa.

Storage

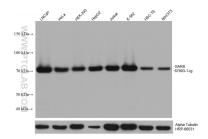
Storage:

Store at -80°C.

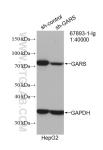
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

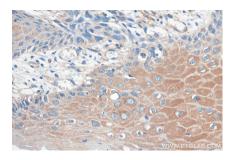
## **Selected Validation Data**



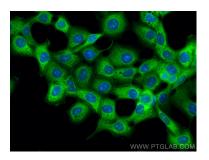
Various lysates were subjected to SDS PAGE followed by western blot with 67893-1-lg (GARS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control. This data was developed using the same antibody clone with 67893-1-PBS in a different storage buffer formulation.



WB result of GARS antibody (67893-1-lg; 1:40000; incubated at room temperature for 1.5 hours) with sh-Control and sh-GARS transfected HepG2 cells. This data was developed using the same antibody clone with 67893-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human skin cancer tissue slide using 67893-1-1g (GARS antibody) at dilution of 1:2000 (under 40x lens). This data was developed using the same antibody clone with 67893-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed A451 cells using GARS antibody (67893-1-lg, Clone: 2H9D3) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67893-1-PBS in a different storage buffer formulation.