

For Research Use Only

GARS Monoclonal antibody, PBS Only



Catalog Number: 67893-1-PBS

Featured Product

Basic Information

Catalog Number: 67893-1-PBS	GenBank Accession Number: BC007755	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 2617	CloneNo.: 2H9D3
Source: Mouse	UNIPROT ID: P41250	
Isotype: IgG2a	Full Name: glycyl-tRNA synthetase	
Immunogen Catalog Number: AG8432	Calculated MW: 739 aa, 83 kDa	
	Observed MW: 75-80 kDa	

Applications

Tested Applications:
WB, IF, IHC, Indirect ELISA

Species Specificity:
Human, mouse, rat

Background Information

Glycyl-tRNA synthetase 1 (GARS, GeneID: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 ATP-dependent ligation of glycine to the 3'-end of its 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.

Storage Buffer:
PBS Only

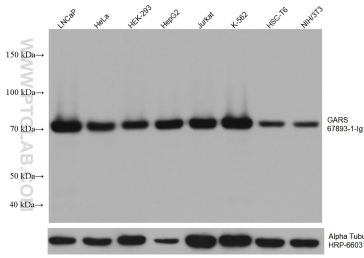
For technical support and original validation data for this product please contact:

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

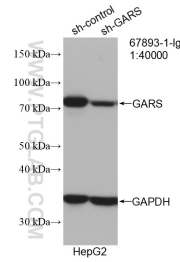
E: proteintech@ptglab.com
W: ptglab.com

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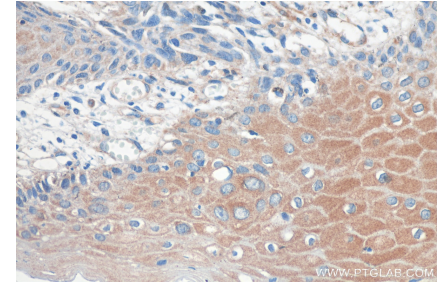
Selected Validation Data



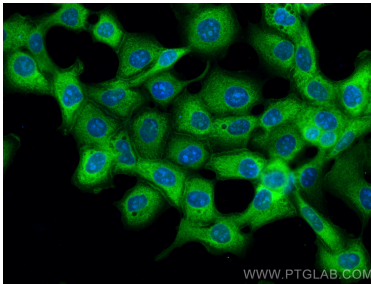
Various lysates were subjected to SDS PAGE followed by western blot with 67893-1-Ig (GARS antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control. This data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



WB result of GARS antibody (67893-1-Ig: 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 paraffin-embedded human skin cancer tissue slide using 67893-1-Ig (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 A431 cells using GARS antibody (67893-1-Ig, 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.