

For Research Use Only

CoraLite®594-conjugated GARS Monoclonal antibody



Catalog Number:CL594-67893

Basic Information

Catalog Number: CL594-67893	GenBank Accession Number: BC007755	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 2617	CloneNo.: 2H9D3
Source: Mouse	Full Name: glycyl-tRNA synthetase	Recommended Dilutions: IF 1:50-1:500
Isotype: IgG2a	Calculated MW: 739 aa, 83 kDa	Excitation/Emission maxima wavelengths: 593 nm / 614 nm
Immunogen Catalog Number: AG8432	Observed MW: 75-80 kDa	

Applications

Tested Applications: FC (Intra), IF	Positive Controls: IF : A431 cells,
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

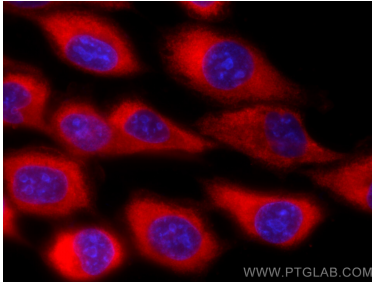
Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

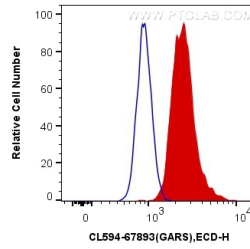
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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

Selected Validation Data



Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using CoraLite®594 GARS antibody (CL594-67893, Clone: 2H9D3) at dilution of 1:200.



1X10⁶ A431 cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human GARS (CL594-67893, Clone:2H9D3) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL488-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).