

For Research Use Only

# CoraLite®594-conjugated GARS Monoclonal antibody

Catalog Number:CL594-67893

Featured Product



## Basic Information

Catalog Number:

CL594-67893

Size:

100ul , Concentration: 1000 ug/ml by  
Nanodrop;

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG8432

GenBank Accession Number:

BC007755

GeneID (NCBI):

2617

UNIPROT ID:

P41250

Full Name:

glycyl-tRNA synthetase

Calculated MW:

739 aa, 83 kDa

Observed MW:

75-80 kDa

Purification Method:

Protein A purification

CloneNo.:

2H9D3

Recommended Dilutions:

IF/ICC 1:50-1:500

Excitation/Emission maxima  
wavelengths:

588 nm / 604 nm

## Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human, mouse, rat

Positive Controls:

IF/ICC : A431 cells,

## 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

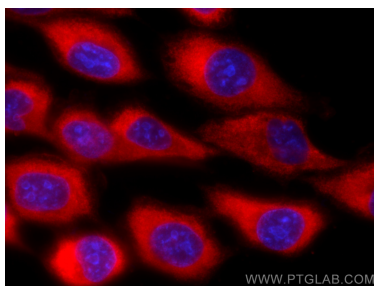
For technical support and original validation data for this product please contact:

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

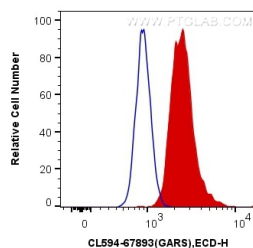
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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## 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.



1X10<sup>6</sup> 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).