

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: 1000 µg/ml	GeneID (NCBI): 2617	CloneNo.: 2H9D3
Source: Mouse	UNIPROT ID: P41250	Recommended Dilutions: IF/ICC 1:50-1:500
Isotype: IgG2a	Full Name: glycyl-tRNA synthetase	Excitation/Emission maxima wavelengths: 588 nm / 604 nm
Immunogen Catalog Number: AG8432	Calculated MW: 739 aa, 83 kDa	
	Observed MW: 75-80 kDa	

Applications

Tested Applications: IF/ICC, FC (Intra)	Positive Controls: IF/ICC : 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

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

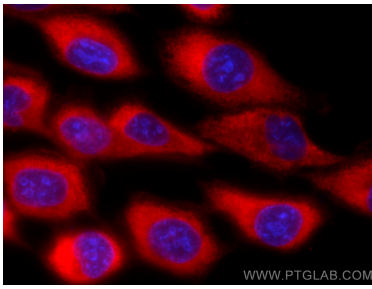
T: 4006900926

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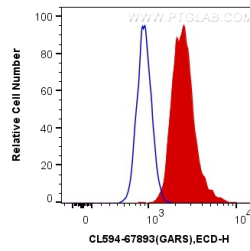
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Selected Validation Data



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



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).