

GARS Antibody

Rabbit mAb Catalog # AP90681

Specification

GARS Antibody - Product Information

Application Primary Accession Reactivity Clonality Other Names HMN5; CMT2D; DSMAV; GlyRS; SMAD1;	WB, IHC <u>P41250</u> Rat Monoclonal
lsotype Host Calculated MW	Rabbit IgG Rabbit 83166 Da
GARS Antibody - Additional Information	
Dilution	WB~~1:1000 IHC~~1:100~500
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human GARS
Description	This gene encodes glycyl-tRNA synthetase, one of the aminoacyl-tRNA synthetases that charge tRNAs with their cognate amino acids. The encoded enzyme is an (alpha)2 dimer which belongs to the class II family of tRNA synthetases. It has been shown to be a target of autoantibodies in the human autoimmune diseases,
Storage Condition and Buffer	polymyositis or dermatomyositis. Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

GARS Antibody - Protein Information

Name GARS1 (HGNC:4162)

Synonyms GARS

Function

Catalyzes the ATP-dependent ligation of glycine to the 3'-end of its cognate tRNA, via the formation of an aminoacyl-adenylate intermediate (Gly-AMP) (PubMed:17544401, PubMed:<a



href="http://www.uniprot.org/citations/24898252" target="_blank">24898252, PubMed:28675565). Also produces diadenosine tetraphosphate (Ap4A), a universal pleiotropic signaling molecule needed for cell regulation pathways, by direct condensation of 2 ATPs. Thereby, may play a special role in Ap4A homeostasis (PubMed:19710017).

Cellular Location

Cytoplasm. Cell projection, axon. Secreted {ECO:0000250|UniProtKB:Q9CZD3}. Secreted, extracellular exosome {ECO:0000250|UniProtKB:Q9CZD3}. Note=In transfected COS7 cells, not detected in mitochondria, nor in Golgi apparatus (PubMed:17035524) Secreted by motor neuron, possibly through the exosome pathway (By similarity). {ECO:0000250|UniProtKB:Q9CZD3, ECO:0000269|PubMed:17035524} [Isoform 2]: Cytoplasm. Cell projection, axon

Tissue Location

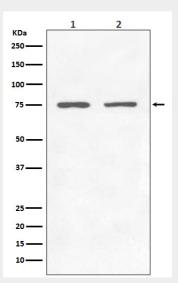
Widely expressed, including in brain and spinal cord. [Isoform 1]: Expressed in brain, spinal cord, muscle, heart, spleen and liver.

GARS Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GARS Antibody - Images



Western blot analysis of GARS expression in (1) Jurkat cell lysate; (2) 293T cell lysate.