

# GARS Antibody

Rabbit mAb

Catalog # AP90681

## Product Information

<b>Application</b>	WB, IHC
<b>Primary Accession</b>	<a href="#">P41250</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	HMN5; CMT2D; DSMAV; GlyRS; SMAD1;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	83166

## Additional Information

<b>Dilution</b>	WB 1:1000~1:2000 IHC 1:50~1:200
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human GARS
<b>Description</b>	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) <sub>2</sub> 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, polymyositis or dermatomyositis.
<b>Storage Condition and Buffer</b>	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.

## Protein Information

<b>Name</b>	GARS1 ( <a href="#">HGNC:4162</a> )
<b>Synonyms</b>	GARS
<b>Function</b>	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: <a href="#">17544401</a> , PubMed: <a href="#">24898252</a> , PubMed: <a href="#">28675565</a> ). 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: <a href="#">19710017</a> ).
<b>Cellular Location</b>	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

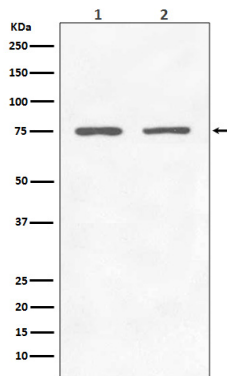
similarity). {ECO:0000250 | UniProtKB:Q9CZD3, ECO:0000269 | PubMed:17035524} [Isoform 2]: Cytoplasm. Cell projection, axon

## Tissue Location

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

## Images

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

Image not found : 202311/AP90681-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human kidney, using GARS Antibody.

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