

**Anti-GARS Rabbit Monoclonal Antibody**  
**Catalog # ABO13411****Specification**

---

**Anti-GARS Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P41250</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-GARS Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

**Anti-GARS Rabbit Monoclonal Antibody - Additional Information****Gene ID 2617****Other Names**

Glycine--tRNA ligase, 6.1.1.14, Diadenosine tetraphosphate synthetase, Ap4A synthetase, 2.7.7.-, Glycyl-tRNA synthetase, GlyRS, Glycyl-tRNA synthetase 1 {ECO:0000312|HGNC:HGNC:4162}, GARS1 ([HGNC:4162](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4162)), GARS

**Calculated MW**

83166 MW KDa

**Application Details**

WB 1:1000-1:2000<br>IHC 1:50-1:200

**Subcellular Localization**

Cytoplasm. Mitochondrion. Cell projection, axon. Associated with granules in cultured neuron cells..

**Tissue Specificity**

Widely expressed, including brain and spinal cord..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human GARS

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-GARS Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/17544401" target="\_blank">17544401</a>, PubMed:<a href="http://www.uniprot.org/citations/24898252" target="\_blank">24898252</a>, PubMed:<a href="http://www.uniprot.org/citations/28675565" target="\_blank">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="http://www.uniprot.org/citations/19710017" target="\_blank">19710017</a>).

**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

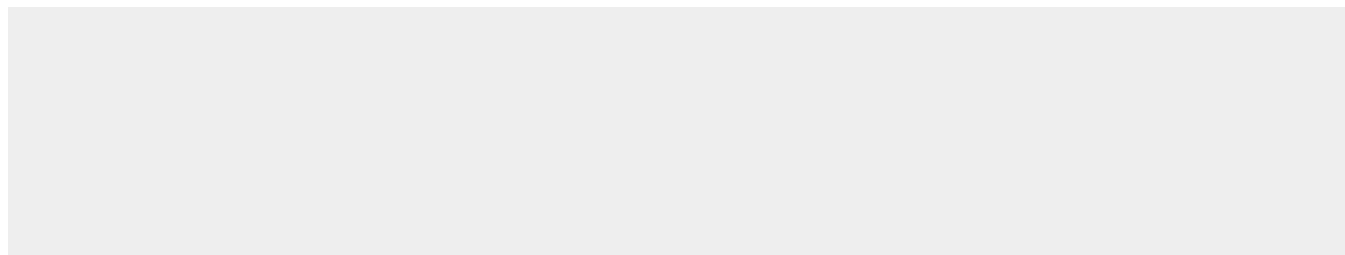
**Tissue Location**

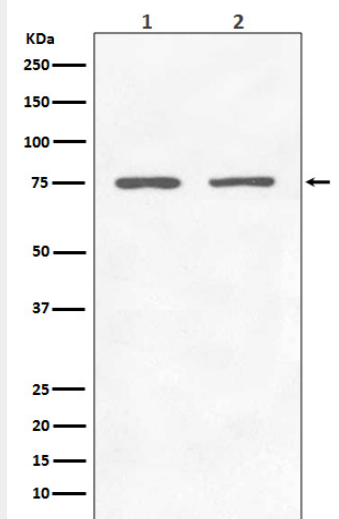
Widely expressed, including in brain and spinal cord. [Isoform 1]: Expressed in brain, spinal cord, muscle, heart, spleen and liver.

**Anti-GARS Rabbit Monoclonal Antibody - Protocols**

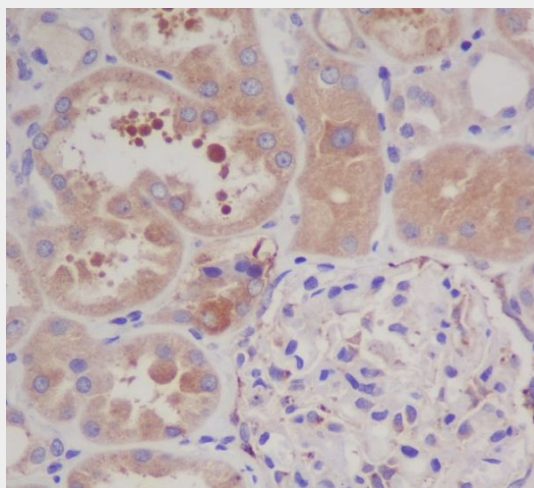
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-GARS Rabbit Monoclonal Antibody - Images**



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



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