

Anti-GARS Rabbit Monoclonal Antibody
Catalog # ABO13411

Specification

Anti-GARS Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC
Primary Accession	P41250
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
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:17544401, PubMed: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

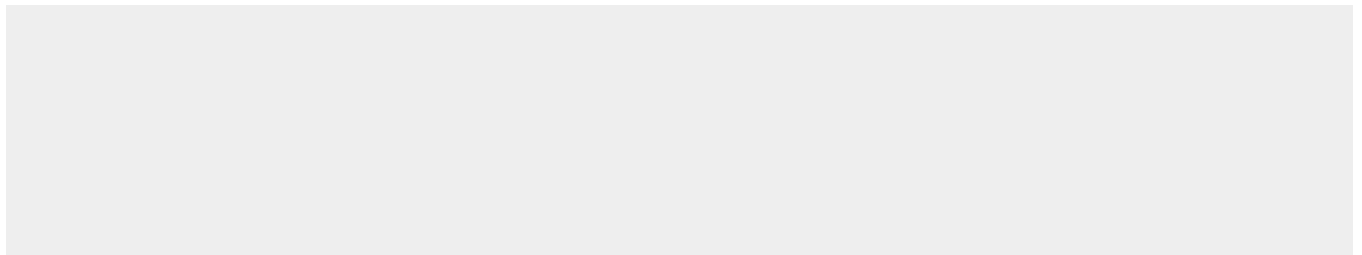
Tissue Location

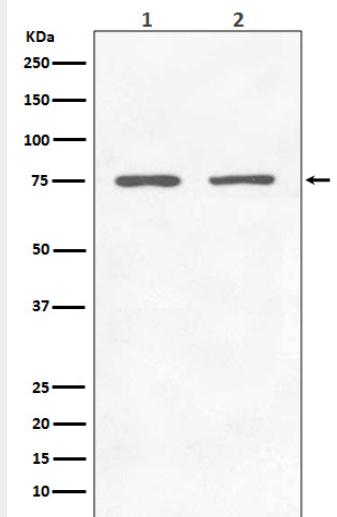
Widely expressed, including in brain and spinal cord. [Isoform 1]: Expressed in brain, spinal cord, muscle, heart, spleen and liver.

Anti-GARS Rabbit Monoclonal Antibody - Protocols

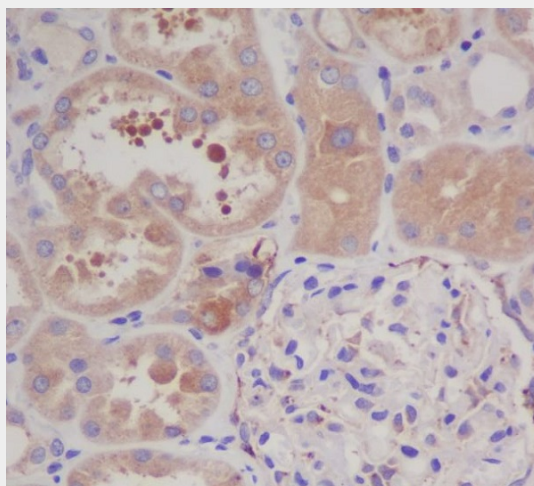
Provided below are standard protocols that you may find useful for product applications.

- [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.