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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), 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 Cytomety
- Cell Culture

Anti-GARS Rabbit Monoclonal Antibody - Images

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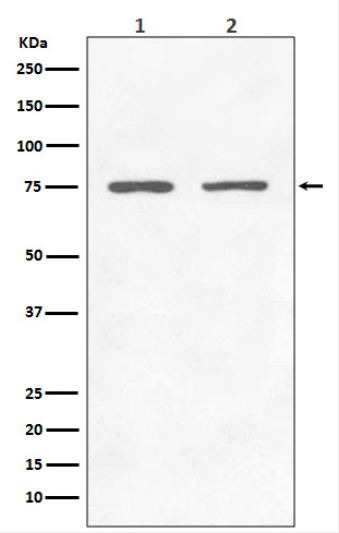
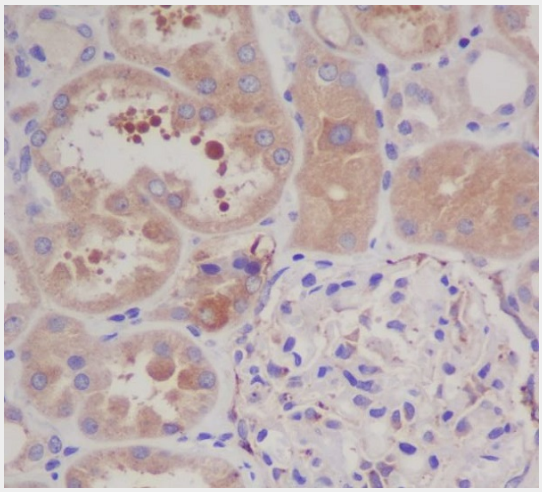


Western blot analysis of GARS expression in (1) Jurkat cell lysate; (2) 293T cell lysate.



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