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GLS Antibody (N-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21776a

Specification

GLS Antibody (N-Term) - Product Information

Application	**WB,E**
Primary Accession	O94925
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**73461**

GLS Antibody (N-Term) - Additional Information

Gene ID 2744

Other Names
Glutaminase kidney isoform, mitochondrial, GLS, K-glutaminase, L-glutamine amidohydrolase, GLS, GLS1, KIAA0838

Target/Specificity
This GLS antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 144-177 amino acids from human GLS.

Dilution
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GLS Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

GLS Antibody (N-Term) - Protein Information

Name GLS

Synonyms GLS1, KIAA0838

Function Catalyzes the first reaction in the primary pathway for the renal catabolism of

glutamine. Plays a role in maintaining acid-base homeostasis. Regulates the levels of the neurotransmitter glutamate, the main excitatory neurotransmitter in the brain (PubMed:30239721, PubMed:30575854, PubMed:30970188).

Cellular Location
[Isoform 1]: Mitochondrion {ECO:0000250|UniProtKB:P13264}. Cytoplasm, cytosol. Note=The 74-kDa cytosolic precursor is translocated into the mitochondria and processed via a 72-kDa intermediate to yield the mature 68- and 65-kDa subunits {ECO:0000250|UniProtKB:P13264} [Glutaminase kidney isoform, mitochondrial 68 kDa chain]: Mitochondrion matrix {ECO:0000250|UniProtKB:P13264} Note=Produced by the proteolytic processing of the 74-kDa cytosolic precursor. {ECO:0000250|UniProtKB:P13264}

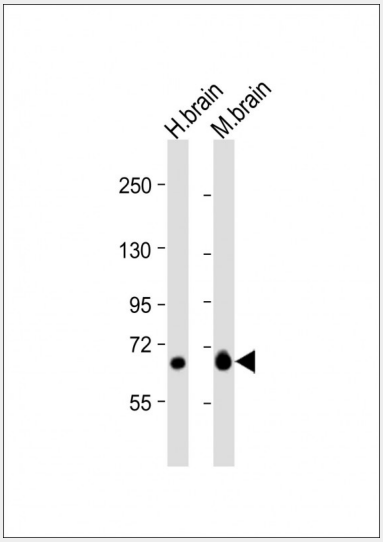
Tissue Location
Isoform 1 and isoform 3 are detected in brain cortex. Isoform 3 is highly expressed in astrocytoma, ganglioglioma and ependymoma. Isoform 1 is highly expressed in brain and kidney, but not detected in liver. Isoform 3 is highly expressed in heart and pancreas, detected at lower levels in placenta, lung, pancreas and kidney, but is not detected in liver. Isoform 2 is expressed in cardiac and skeletal muscle.

GLS Antibody (N-Term) - 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

GLS Antibody (N-Term) - Images



All lanes : Anti-GLS Antibody (N-Term) at 1:2000 dilution Lane 1: human brain lysate Lane 2: mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 73 kDa Blocking/Dilution buffer:

5% NFDM/TBST.

GLS Antibody (N-Term) - Background

Catalyzes the first reaction in the primary pathway for the renal catabolism of glutamine. Plays a role in maintaining acid-base homeostasis. Regulates the levels of the neurotransmitter glutamate in the brain. Isoform 2 lacks catalytic activity.

GLS Antibody (N-Term) - References

Elgadi K.M.,et al.Physiol. Genomics 1:51-62(1999).
Nagase T.,et al.DNA Res. 5:355-364(1998).
Chavez R.A.,et al.Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.
Holcomb T.,et al.Brain Res. Mol. Brain Res. 76:56-63(2000).
Turner A.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.