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GLS Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21834b

Product Information

Application	WB, E
Primary Accession	O94925
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53877
Calculated MW	73461

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 555-587 amino acids from human GLS.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
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 (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

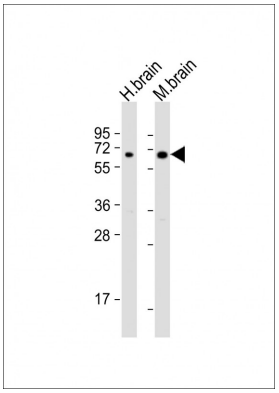
Background

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.

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.

Images



All lanes : Anti-GLS Antibody (C-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.