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GLS2 Antibody (C-term E513)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6650D

Specification

GLS2 Antibody (C-term E513) - Product Information

Application	**WB, IHC-P-Leica,E**
Primary Accession	Q9UI32
Other Accession	P28492, Q571F8, NP_037399.2
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**498-524**

GLS2 Antibody (C-term E513) - Additional Information

Gene ID 27165

Other Names
Glutaminase liver isoform, mitochondrial, GLS, L-glutaminase, L-glutamine amidohydrolase, GLS2, GA

Target/Specificity
This GLS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 498-524 amino acids of human GLS2.

Dilution
WB~~1:1000
IHC-P-Leica~~1:500

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
GLS2 Antibody (C-term E513) is for research use only and not for use in diagnostic or therapeutic procedures.

GLS2 Antibody (C-term E513) - Protein Information

Name GLS2

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Synonyms GA

Function Plays an important role in the regulation of glutamine catabolism. Promotes mitochondrial respiration and increases ATP generation in cells by catalyzing the synthesis of glutamate and alpha- ketoglutarate. Increases cellular anti-oxidant function via NADH and glutathione production. May play a role in preventing tumor proliferation.

Cellular Location
Mitochondrion.

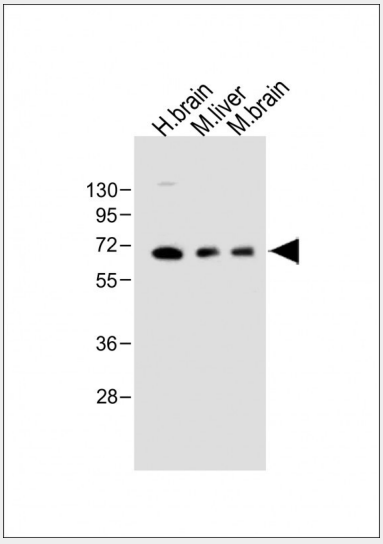
Tissue Location
Highly expressed in liver. Expressed in brain and pancreas. Not observed in heart, placenta, lung, skeletal muscle and kidney. Expression is significantly reduced in hepatocellular carcinomas.

GLS2 Antibody (C-term E513) - 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

GLS2 Antibody (C-term E513) - Images



All lanes : Anti-GLS2 Antibody (C-term E513) at 1:1000 dilution Lane 1: Human brain lysate Lane 2: Mouse liver lysate Lane 3: 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 : 66 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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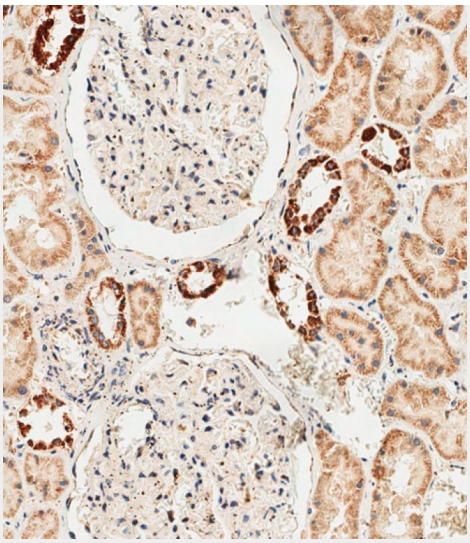

Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP6650D performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

GLS2 Antibody (C-term E513) - Background

The protein encoded by this gene is a mitochondrial phosphate-activated glutaminase that catalyzes the hydrolysis of glutamine to stoichiometric amounts of glutamate and ammonia. This protein is functionally similar to the kidney glutaminase but is a little smaller in size. Originally thought to be liver-specific, this protein has been found in other tissues as well. At least one transcribed pseudogene has been found for this gene. [provided by RefSeq].

GLS2 Antibody (C-term E513) - References

Hu, W., et al. Proc. Natl. Acad. Sci. U.S.A. 107(16):7455-7460(2010)
Suzuki, S., et al. Proc. Natl. Acad. Sci. U.S.A. 107(16):7461-7466(2010)
Szeliga, M., et al. Glia 57(9):1014-1023(2009)
Tian, C., et al. J. Neurochem. 105(3):994-1005(2008)
Maeshima, H., et al. Prog. Neuropsychopharmacol. Biol. Psychiatry 31(7):1410-1418(2007)

GLS2 Antibody (C-term E513) - Citations

- Mitochondrial GCN5L1 regulates glutaminase acetylation and hepatocellular carcinoma
- Loss of tyrosine catabolic enzyme HPD promotes glutamine anaplerosis through mTOR signaling in liver cancer
- Liver-Type Glutaminase GLS2 Is a Druggable Metabolic Node in Luminal-Subtype Breast Cancer
- MYC oncogene overexpression drives renal cell carcinoma in a mouse model through glutamine metabolism.