

GLS2 Antibody (C-term E513)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6650D

Product Information

Application	WB, IHC-P-Leica, E
Primary Accession	Q9UI32
Other Accession	P28492 , Q571F8 , NP_037399.2
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20072
Calculated MW	66323
Antigen Region	498-524

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

Protein Information

Name	GLS2
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.

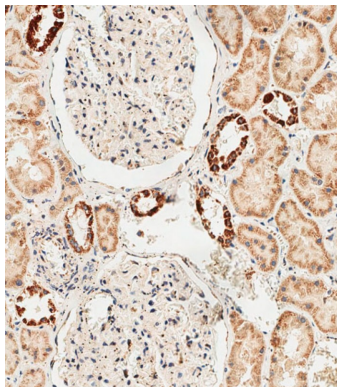
Background

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].

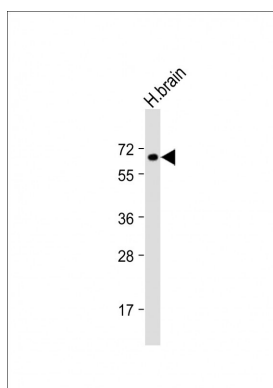
References

- 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)

Images



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.



Anti-GLS2 Antibody (C-term E513) at 1:2000 dilution + Human 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.

Citations

- [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.](#)
- [Loss of tyrosine catabolic enzyme HPD promotes glutamine anaplerosis through mTOR signaling in liver cancer](#)
- [Mitochondrial GCN5L1 regulates glutaminase acetylation and hepatocellular carcinoma](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.