

GLS2 Antibody (C-term E513)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5347

Product Information

Application	IHC-P, WB
Primary Accession	<u>Q9UI32</u>
Other Accession	P28492, Q571F8, NP_037399.2
Reactivity	Mouse, Rat, Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66323
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	27165
Antigen Region	498-524
Other Names	GLS2; GA; Glutaminase liver isoform, mitochondrial; L-glutaminase; L-glutamine amidohydrolase
Dilution	IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	This GLS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 498-524 amino acids from the C-terminal region of human GLS2.
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.

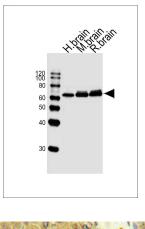
Background

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].

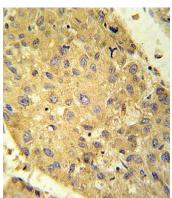
References

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)

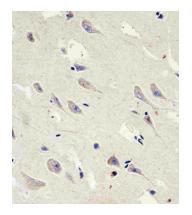
Images



Western blot analysis of lysates from human brain, mouse brain, rat brain tissue lysate (from left to right), using GLS2 Antibody (C-term E513)(Cat. #AW5347). AW5347 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.



GLS2 antibody(C-term E513) (Cat. #AW5347) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GLS2 antibody(C-term E513) for immunohistochemistry. Clinical relevance has not been evaluated.



Immunohistochemical analysis of paraffin-embedded H.brain section using GLS2 Antibody (C-term E513)(Cat#AW5347). AW5347 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

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