

# GLS2 Antibody (C-term E513)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5347

## **Product Information**

Application IHC-P, WB Primary Accession Q9UI32

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.

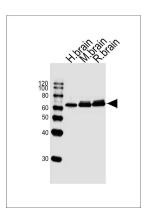
# **Background**

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].

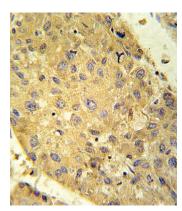
### References

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)

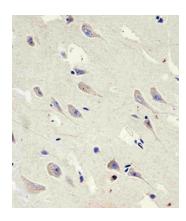
# **Images**



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'.