

GLS2 Antibody (C-term E513) Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5347

### Specification

## GLS2 Antibody (C-term E513) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW Isotype Antigen Source WB, IHC-P,E <u>O9UI32</u> <u>P28492</u>, <u>O571F8</u>, <u>NP\_037399.2</u> Human, Mouse, Rat Rabbit Polyclonal H=66;M=66;Rat=66,59 KDa Rabbit IgG HUMAN

## GLS2 Antibody (C-term E513) - Additional Information

Gene ID 27165

Antigen Region 498-524

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

**Dilution** WB~~1:1000 IHC-P~~1:10~50

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.

### GLS2 Antibody (C-term E513) - 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**

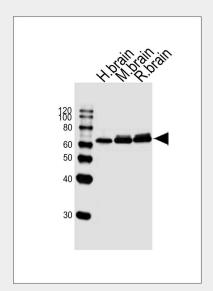
Highly expressed in liver. Expressed in brain and pancreas. Not observed in heart, placenta, lung, skeletal muscle and kidney. Expression is significantly reduced in hepatocellular carcinomas.

## GLS2 Antibody (C-term E513) - Protocols

Provided below are standard protocols that you may find useful for product applications.

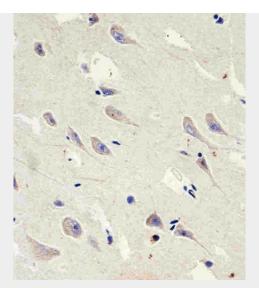
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# GLS2 Antibody (C-term E513) - Images

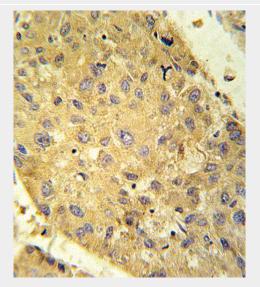


Western blot analysis of lysates from human brain, mouse brain, rat brain tissue lysate (from left to right), using GLS2 Antibody (C-term E513)(Cat. #AW5347). AW5347 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at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





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.



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.

## 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)