

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

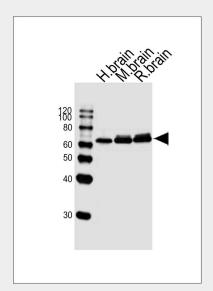
Highly expressed in liver. Expressed in brain and pancreas. Not observed in heart, placenta, lung, skeletal muscle and kidney. Expression is significantly reduced in hepatocellular carcinomas.

GLS2 Antibody (C-term E513) - Protocols

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

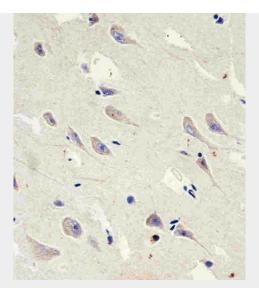
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GLS2 Antibody (C-term E513) - Images

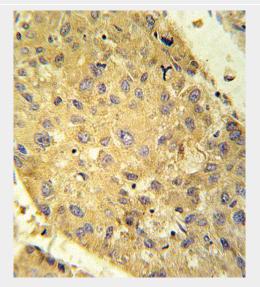


Western blot analysis of lysates from human brain, mouse brain, rat brain tissue lysate (from left to right), using GLS2 Antibody (C-term E513)(Cat. #AW5347). AW5347 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at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