

# GLS2 Antibody (C-term E513)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6650D

#### Specification

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

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P-Leica,E <u>O9UI32</u> <u>P28492</u>, <u>O571F8</u>, <u>NP\_037399.2</u> Human, Mouse Rat Rabbit Polyclonal Rabbit IgG 498-524

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

#### 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



All lanes : Anti-GLS2 Antibody (C-term E513) at 1:1000 dilution Lane 1: Human brain lysate Lane 2: Mouse liver lysate Lane 3: Mouse 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.





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.

## 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)

GLS2 Antibody (C-term E513) - Citations

- Mitochondrial GCN5L1 regulates glutaminase acetylation and hepatocellular carcinoma
- Loss of tyrosine catabolic enzyme HPD promotes glutamine anaplerosis through mTOR signaling in liver cancer
- Liver-Type Glutaminase GLS2 Is a Druggable Metabolic Node in Luminal-Subtype Breast Cancer
- <u>MYC oncogene overexpression drives renal cell carcinoma in a mouse model through</u> <u>glutamine metabolism.</u>