10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GLS2 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8595b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UI32
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1758CT879.217.60
Calculated MW	66323

Additional Information

Gene ID	27165
Other Names	Glutaminase liver isoform, mitochondrial, GLS, 3.5.1.2, L-glutaminase, L-glutamine amidohydrolase, GLS2, GA
Target/Specificity	This GLS2 antibody is generated from a mouse immunized with a recombinant protein of human GLS2.
Dilution	WB~~1:1000-1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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 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.

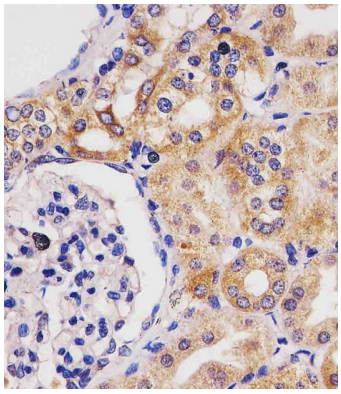
Background

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.

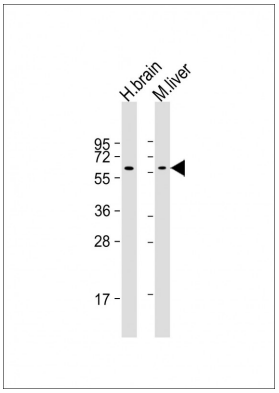
References

Gomez-Fabre P.M.,et al.Biochem. J. 345:365-375(2000).
Perez-Gomez C.,et al.Biochem. J. 370:771-784(2003).
Chavez R.A.,et al.Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Scherer S.E.,et al.Nature 440:346-351(2006).

Images



AM8595b staining GLS2 in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



All lanes : Anti-GLS2 Antibody at 1:1000-1:2000 dilution Lane 1: human brain lysate Lane 2: mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 66 kDa Blocking/Dilution buffer: 5% NFDM/TBST.