

Product datasheet for **TA319893**

GLS2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 0.5 - 1 ug/mL, ICC: 5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	GLS2 antibody was raised against a 18 amino acid synthetic peptide near the center terminus of human GLS2.
Formulation:	GLS2 Antibody is supplied in PBS containing 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	GLS2 Antibody is affinity chromatography purified via peptide column.
Conjugation:	Unconjugated
Storage:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	glutaminase 2
Database Link:	NP_037399 Entrez Gene 192268 RatEntrez Gene 216456 MouseEntrez Gene 27165 Human Q9UI32



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Background:

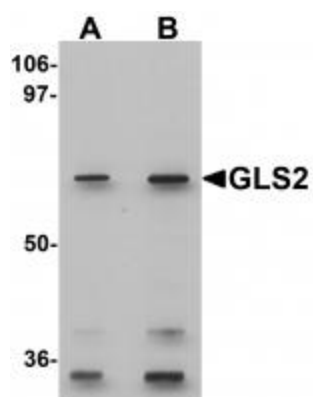
GLS2 Antibody: Phosphate-activated glutaminase, also known as Glutaminase 2 (GLS2), was initially isolated from rat liver, although it has been shown to be expressed in other tissues. Like the functionally similar, larger kidney glutaminase, GLS2 catalyzes the hydrolysis of glutamine to stoichiometric amounts of glutamate and ammonia. Expression of GLS2 is increased by p53 under both stressed and nonstressed conditions, resulting in increased levels of glutamate and alpha-ketoglutarate, which in turn results in enhanced mitochondrial respiration and ATP generation. GLS2 also regulates antioxidant defense function in cells by increasing reduced glutathione levels and decreasing ROS-levels, suggesting that GLS2 acts as a mediator of p53's role in antioxidant defense in addition to its role in energy metabolism.

Synonyms:

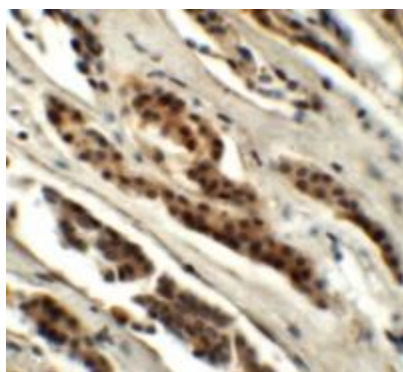
GA; GLS; hLGA; LGA

Protein Pathways:

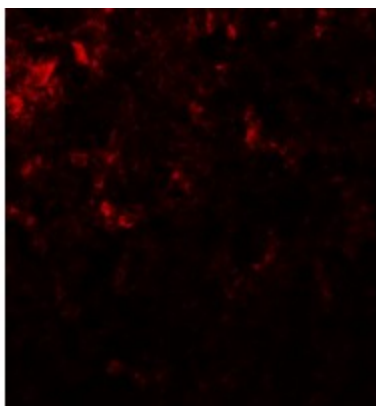
Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, D-Glutamine and D-glutamate metabolism, Metabolic pathways, Nitrogen metabolism

Product images:

Western blot analysis of GLS2 in rat kidney tissue lysate with GLS2 antibody at (A) 0.5 and (B) 1 ug/mL.



Immunohistochemistry of GLS2 in human kidney tissue with GLS2 antibody at 5 ug/mL.



Immunofluorescence of GLS2 in rat liver cells with GLS2 antibody at 20 ug/mL.