

Product datasheet for **TA336821**

GLS2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, ICC/IF, IHC, Simple Western, WB
Recommended Dilution:	ELISA: 1:100-1:2000, Immunohistochemistry: 5 ug/ml, Immunocytochemistry/ Immunofluorescence: 20 ug/mL, Western Blot: 0.5-1 ug/ml, Immunohistochemistry-Paraffin: 5 ug/ml, Simple Western: 1:100
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Antibody was raised against a 18 amino acid peptide near the center terminus of human GLS2 (NP_037399).
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at - 20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Peptide affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	66 kDa
Gene Name:	glutaminase 2
Database Link:	NP_037399 Entrez Gene 192268 RatEntrez Gene 216456 MouseEntrez Gene 27165 Human Q9UI32



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Background:

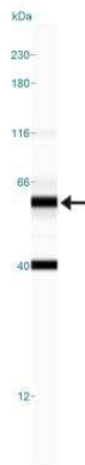
Phosphate-activated glutaminase, also known as Glutaminase 2 (GLS2), was initially isolated from rat liver, although it has been shown to be expressed in other tissues. Like the functionally similar, larger kidney glutaminase, GLS2 catalyzes the hydrolysis of glutamine to stoichiometric amounts of glutamate 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:

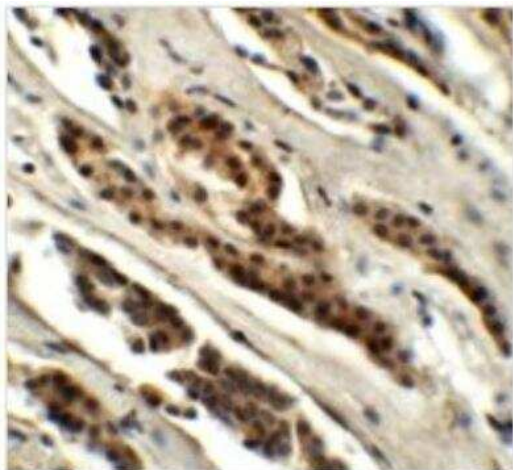
GA; GLS; hLGA; LGA

Protein Pathways:

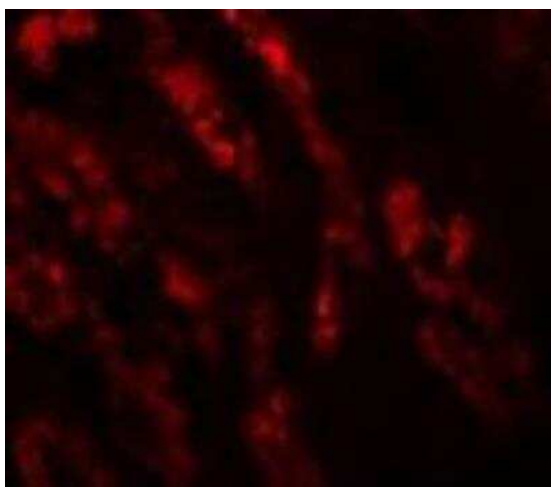
Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, D-Glutamine and D-glutamate metabolism, Metabolic pathways, Nitrogen metabolism

Product images:

Simple Western: GLS2 Antibody TA336821 - Simple Western lane view shows a specific band for GLS2 in 0.5 mg/ml of Hek293 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Immunohistochemistry: GLS2 Antibody TA336821 - Immunohistochemistry of GLS2 in human kidney tissue with GLS2 antibody at 5 ug/mL.



Immunocytochemistry/Immunofluorescence:
GLS2 Antibody TA336821 - of GLS2 in Human
Kidney cells. Dilution 20 ug/mL.