



Rabbit Anti-GLS1 antibody

SL10341R

Product Name:	GLS1
Chinese Name:	谷氨酰胺酶1/Glutaminase抗体
Alias:	mitochondrial; AAD20; GLS; GLS1; GLSK_HUMAN; Glutaminase kidney isoform; K-glutaminase; KIAA0838; L-glutamine amidohydrolase; DKFZp686O15119; FLJ10358.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	72kDa
Cellular localization:	cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GLS1:101-200/669
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes the K-type mitochondrial glutaminase. The encoded protein is an phosphate-activated amidohydrolase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. This protein is primarily expressed in the brain and kidney plays an essential role in generating energy for metabolism, synthesizing the brain neurotransmitter glutamate and maintaining acid-base balance in the kidney. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2012].

Function:

Catalyzes the first reaction in the primary pathway for the renal catabolism of glutamine. Plays a role in maintaining acid-base homeostasis. Regulates the levels of the neurotransmitter glutamate in the brain. Isoform 2 lacks catalytic activity.

Subunit:

Heterotetramer. Interacts with ATCAY; the interaction is direct and may control GLS localization, negatively regulating its activity.

Subcellular Location:

Isoform 1: Cytoplasm, cytosol. Isoform 3: Mitochondrion.

Tissue Specificity:

Isoform 1 and isoform 3 are detected in brain cortex. Isoform 3 is highly expressed in astrocytoma, glioblastoma and ependymoma. Isoform 1 is highly expressed in brain and kidney, but not detected in liver. Isoform 3 is highly expressed in heart and pancreas, detected at lower levels in placenta, lung, pancreas and kidney, but is not detected in liver. Isoform 2 is expressed in cardiac and skeletal muscle.

Similarity:

Belongs to the glutaminase family.
Contains 2 ANK repeats.

SWISS:

O94925

Gene ID:

2744

Database links:

[Entrez Gene: 2744](#)Human

[Entrez Gene: 14660](#)Mouse

[Entrez Gene: 24398](#)Rat

[Omim: 138280](#)Human

[SwissProt: O94925](#)Human

[SwissProt: D3Z7P3](#)Mouse

[SwissProt: P13264](#)Rat

[Unigene: 116448](#)Human

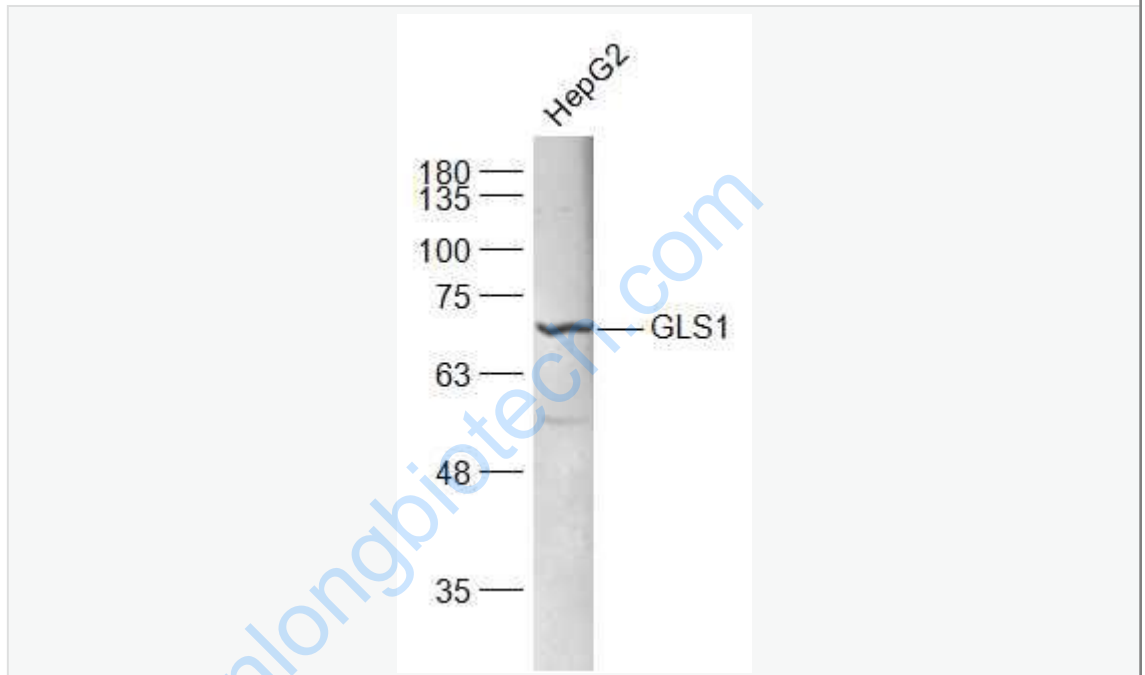
[Unigene: 30102](#)Mouse

[Unigene: 5762](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

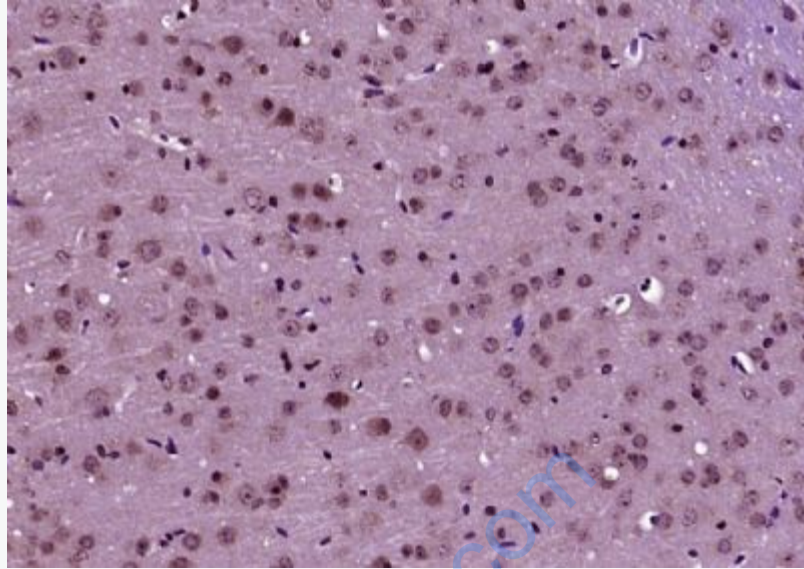
HepG2(Human) Cell Lysate at 30 ug

Primary: Anti-GLS1 (SL10341R) at 1/500 dilution

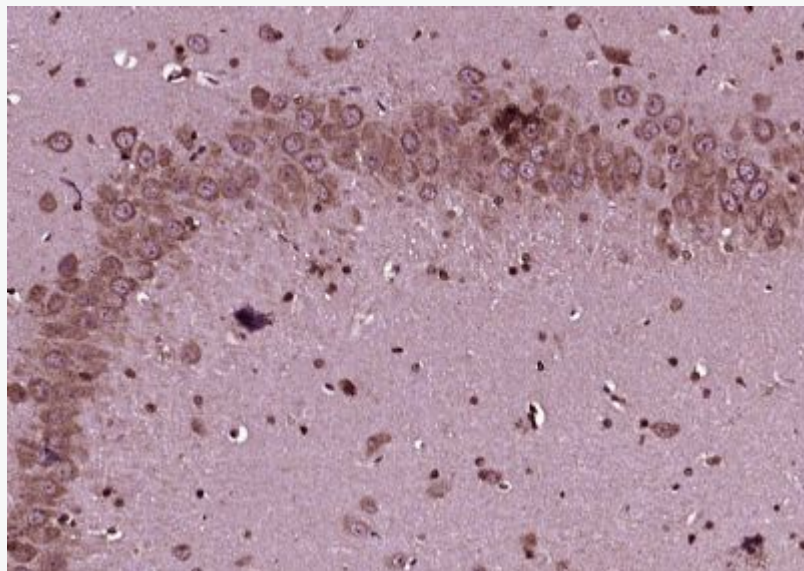
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 72 kD

Observed band size: 72 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GLS1) Polyclonal Antibody, Unconjugated (SL10341R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GLS1) Polyclonal Antibody, Unconjugated (SL10341R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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