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

GLS2 Rabbit pAb

Catalog # AP99705

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UI32
Other Accession	Q9UI32
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66323
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GLS2/LGA
Epitope Specificity	41-140/602
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the glutaminase family. Contains 2 ANK repeats.
SUBUNIT	Interacts with the PDZ domain of the syntrophin SNTA1.Interacts with the PDZ domain of TAX1BP3.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	LGA is a 602 amino acid protein that localizes to the mitochondrion and contains two ANK repeats. Expressed in brain, liver and pancreas, LGA functions as a mitochondrial phosphate-activated glutaminase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. LGA is overexpressed in breast cancer cell lines, suggesting a role for LGA in tumorigenesis. The gene encoding LGA maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

Additional Information

Gene ID	27165
Other Names	GA; GLS; LGA; hLGA; A330074B06Rik; GLSL_HUMAN; GLS2; L-glutaminase; L-glutamine amidohydrolase; 3.5.1.2; GLSL_MOUSE; L-glutamine amidohydrolase (LGA); Kiaa4146; glutaminase 2; glutaminase 2 (liver, mitochondrial)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.