

GLSK rabbit pAb

Catalog No: YN4051

Reactivity: Human; Mouse; Rat

Applications: WB

Target: GLSK

Fields: >>Arginine biosynthesis;>>Alanine, aspartate and glutamate metabolism;>>D-

Amino acid metabolism;>>Metabolic pathways;>>Glutamatergic synapse;>>GABAergic synapse;>>Proximal tubule bicarbonate

reclamation;>>MicroRNAs in cancer;>>Central carbon metabolism in cancer

Gene Name: GLS GLS1 KIAA0838

O94925

D3Z7P3

Protein Name: GLSK

Human Gene Id: 2744

Human Swiss Prot

No:

Mouse Gene Id: 14660

Mouse Swiss Prot

No:

Rat Gene ld: 24398

Rat Swiss Prot No: P13264

Immunogen: Synthesized peptide derived from human GLSK AA range: 162-212

Specificity: This antibody detects endogenous levels of GLSK at Human/Mouse/Rat

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1 ?500-2000

1/2



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 74kD

Background: 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: catalytic activity:L-glutamine + H(2)O = L-glutamate + NH(3).,function:Catalyzes

the first reaction in the primary pathway for the renal catabolism of

glutamine., similarity: Belongs to the glutaminase family., similarity: Contains 1 ANK repeat., tissue specificity: KGA is expressed predominantly in brain and kidney but not in liver, GAC is expressed principally in cardiac muscle and pancreas but not in liver or brain, and GAM is expressed solely in cardiac and skeletal muscle.,

Subcellular Location:

[Isoform 1]: Mitochondrion . Cytoplasm, cytosol . The 74-kDa cytosolic precursor is translocated into the mitochondria and processed via a 72-kDa intermediate to

yield the mature 68- and 65-kDa subunits. .; [Isoform 3]: Mitochondrion .;

[Glutaminase kidney isoform, mitochondrial 68 kDa chain]: Mitochondrion matrix . Produced by the proteolytic processing of the 74-kDa cytosolic precursor. .; [Glutaminase kidney isoform, mitochondrial 65 kDa chain]: Mitochondrion matrix .

Produced by the proteolytic processing of the 74-kDa cytosolic precursor. .

Expression: Isoform 1 and isoform 3 are detected in brain cortex. Isoform 3 is highly

expressed in astrocytoma, ganglioglioma 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.

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